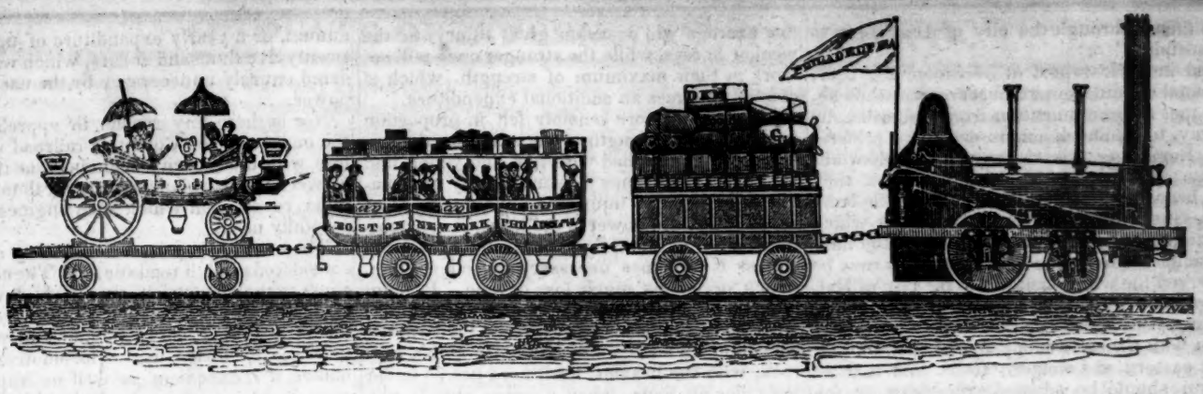

AMERICAN RAILROAD JOURNAL,
AND ADVOCATE OF INTERNAL IMPROVEMENTS.

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AMERICAN RAILROAD JOURNAL, &c.

NEW-YORK, APRIL 19, 1834.

It is much to be desired that the bill mentioned in the following notice may become a law:

Survey of the New-York and Erie Railroad Route.—A bill providing for this survey through the southern tier of counties, at the expense of the State, under a principal engineer to be appointed by the Governor, is now before the Legislature.

Internal Improvement.—A project for connecting, by a sloop and steamboat canal, the great western lakes and the Hudson river is on foot, and seems to command great attention from the inhabitants of the interior of our State as well as those of Michigan and Ohio. The plan is to render navigable the Oswego, Cayuga, Oneida, Seneca, and Mohawk rivers, the Oneida lake and Wood Creek. We give the following proceedings of the Executive Council of the Territory of Michigan. The project is one of great importance, and we trust will be found practicable.—[Standard.]

Executive Department, March 7th, 1834.

Rudolph Bunner, Esq.,
President of the Convention at Oswego, N. Y.

Sir,—In accordance with the resolution of the Legislative Council of the Territory of Michigan, I have the honor to transmit herewith their resolutions, concurring "in the views adopted at a meeting of the citizens of the county of Oswego, New-York, on the 12th Dec. 1833, relative to the formation of a navigable communication on the American side between Lakes Erie and Ontario."

I have the honor to be, very respectfully, your obedient servant, G. B. Porter.

Council Chamber, Detroit, March 1st, 1834.

Resolved, by the Legislative Council of the Territory of Michigan, That the efforts made in the western part of the State of New-York and elsewhere, to effect a navigable communication, on the American side, between Lakes Erie and Ontario, are highly laudable, and meet with the entire concurrence in this House.

Resolved, That this enlightened enterprise, if successful, will be of vast usefulness to this Territory, and the whole country bordering upon the great lakes.

Resolved, That such improvement is the more imperiously required, in consequence of the rapid advance of our neighbors in Upper Canada, and, in the event of future wars, would be of the utmost importance to the security and defence of this frontier.

Resolved, That we concur in the views contained in the memorial and resolutions on this subject, adopted at a meeting of the citizens of the county of Oswego, New-York, on the 12th of December, 1833, which have been communicated to this House.

Resolved, That the Governor of this Territory be requested to transmit a copy of the foregoing resolutions to Hon Lucius Lyon, Delegate in Congress from this Territory, and to Rudolph Bunner, Esq., President of the Convention at Oswego, referred to in the previous resolution.

John McDowell,
President of the Legislative Council.

(Attest,) John Norvall, Secretary.

Trenton, April 12.—*Delaware and Raritan Canal.*—The water, let into the feeder week before last, continues to flow and gradually increase in the main Canal; there will soon be sufficient, if no breach occurs, for boating hence to Princeton. The main Canal is of sufficient capacity to contain 8 feet in depth and 60 feet wide at the surface.—[State Gazette.]

The following Report, relative to the use of Railroads in Pennsylvania, will be found interesting to many of our readers:

Report relative to the Use of the Pennsylvania Railroads—Mr. Keating, *Chairman*—*Read in the House of Representatives, March* 4, 1834.

The Committee to whom was referred, on the 9th December last, so much of the Governor's message as relates to the transportation on and use of the railroads of this Commonwealth, report—

That they have investigated the subject committed to them, with all the deliberation which it required, and that they herewith submit a bill embracing the result of their inquiries.

The novelty of the subject, and the difficulties which surround it, will at once appear from the fact, that, in the course of their investigations, the committee have met with no parallel case to which they could look for conclusive information. All the railroads in this country, and all those in Great Britain, (so far as your committee know,) are owned by private companies; and no information was within their reach, in relation to the railroads on the continent of Europe, which could be availed in this case.

Having, therefore, no precedent to guide them, in relation to railroads made by a state or government, the committee were obliged to confine themselves to the investigation of the general principles applicable to the case, to the analogies to be derived from the experience of private companies, and to the opinions of enlightened and experienced men.

The first general principle they considered, was, what was the object of these works? Whether intended to benefit a large trade, carried on a long line of public work; or to facilitate the intercourse between points not far distant from each other? Thus, the first inquiry is, undoubtedly, was the Philadelphia and Columbia railroad made to benefit the great trade between the east and west, between the Allegany and the Lakes, on the one side, and the Delaware on the other; or was it chiefly intended for the readier and cheaper transportation to the market of Philadelphia of the various produce of the rich counties of Chester and Lancaster? After it shall be decided which of these objects is the most important, to the accomplishment of that object the plan must be made to conform. Upon this point the committee believe there can be no doubt. The great resources of the State could not have been appealed to. Three millions of the public money would not have been expended to facilitate any intercourse of a local and limited character. If a state is ever justifiable in undertaking a great work of this kind, it can only be where the benefits are to be general, and where the advantages of them can be felt in the remotest corners of her territory. In looking back to the history of our public improvements, we obtain proof that this was really the object first had in view The public-spirited citizen, who for so many years devoted his time and his best abilities to the promotion of the improvement of the State, and who has, in a measure, identified his name with them, appears to have been the first who brought the subject before the Legislature. In H. R. vol. 1. 1826—7, we find that on the 21st of March. Mr. Lehman introduced the following resolution:

"Whereas the State of Maryland has incorporated a company, with a view of intersecting the Pennsylvania canal, for the purpose of conveying the trade of Pennsylvania to Baltimore. And whereas, &c.—Therefore,

"Resolved, that the committee on inland navigation and internal improvement be instructed to consider the expediency of requiring the board of canal commissioner to make suitable examinations, within the present year, with a view to the aforesaid objects, and to make report early in the ensuing session of the Legislature; and also to make report in relation to the practicability and probable cost of a railway along the valley of the Susquehannah, from the Pennsylvania canal to Columbia, and

from thence through the city of Lancaster to Philadelphia."

And in their report of December 28, 1827, the canal commissioners observe, that they believe that a communication from Columbia, by railway, to Philadelphia, is decidedly preferable. Regarding this railway as an important feature in the system of improvement, they have been gratified to find, that from the bank of the Susquehannah, (for surmounting which a stationary engine will be required,) the limit of graduation for locomotive machinery may be preserved the whole distance to the city of Philadelphia.

Thus, it is evident that this road was undertaken with a view, principally, to facilitate the great eastern and western trade, and that no system should be adopted which can, in any manner, impair its usefulness in this respect; and the great object being the reduction of the price of transportation for heavy and bulky articles of comparatively little intrinsic value, but carried from remote parts of the State, no regulation should be made which may in the least create a tax upon this trade, by increasing the price of transportation upon the railroad. It behoves the Legislature to bear in mind, that the lumber, the coal, the iron, the grain, the flour, the salt, the whiskey, &c. &c. of the west, are all articles of comparatively low price, many of which now struggle with difficulty in the port of Philadelphia, against the importation from eastern or transatlantic ports —and that any regulation tending to check or to impede transportation, or to raise the price of freights, is a direct tax upon the trade, upon the industry, whether agricultural, commercial or manufacturing, of Pennsylvania, injuring our means of competition with foreign industry, both at home and abroad. It is a bounty given to the foreigner, without any equivalent to ourselves. Let us, therefore, in the system of management of our road, discard every prejudice, whether resulting from preconceived ideas, or from local interests, and view the question in its broadest light, as one affecting the whole industry of Pennsylvania.

The great objects of transportation are economy, rapidity, and certainty; and to these three items all others should be made to yield.

1. What kind of power should be used on the road?

2. Whether it should be a high road or not?

3. By whom the motive power should be owned?

4. By whom the cars should be owned?

After which, we shall be able to arrive at safe conclusions as to the provisions of a law to regulate transportation on our roads.

The first question is, as to the power? Two kinds may be used, animal or mechanical, horse or steam power. If we examine the profile of the Columbia railroad, we will find its grade constantly varying; part of it ascending and another part of it descending; varying through every grade, from a dead level to an inclination of forty-five feet per mile. This naturally leads us to the conclusion that the power must be such that it should pass with equal facility (though with varying rapidity) through all the changes of grade, of an ascent of forty-five feet per mile, or a descent of the same steepness; and it is evident that no horse power can effect this. He cannot drag up hill the same weight that he can drag down hill, unless the load be much less than a maximum, in which case there is a great loss of power, and great additional expense. It has been suggested that the power might be increased, by having spare horses stationed along the line, at such points as would present additional resistance; but this is inapplicable in a road presenting so many and such varieties of grade as the Columbia railroad.

Again. It is well known that scarcely can two horses be found possessed of the same speed. All the horses must be made, however, to travel at a uniform rate upon a railroad, and as the load cannot be shifted according to the ever-varying strength of each, it follows that the average will occasion great injury to the weaker horses, while the stronger ones will not work at their maximum of strength, which of course produces an additional expenditure.

This evil is more sensibly felt in proportion to the increased length of the road; as the engine (while supplied with fuel and water, and well oiled,) continues to work for any reasonable time without injury or impairment of its effect, while the power of the horse is constantly impaired by the fatigue of his muscles, until at last it becomes necessary to relieve him, which occasions much loss of time. In point of speed, likewise, great advantages are derived from the use of locomotives, since their rate of travelling on such a line as the Columbia railroad, with the heaviest load, need not be under ten miles an hour, when a horse should not, when loaded, travel faster than two and a half miles to produce his maximum of effect.

Reasoning from analogy and theory, we conclude that horse power should not be used where locomotive engines can work with safety. Experience confirms this position.

There is scarcely a railroad of any extent, admitting the use of steam power, in which it is not chiefly or wholly used. In England, the Liverpool and Manchester, the Stockton and Darlington railroad, and others, the St. Etienne and Lyons road in France. In the United States we have, as instances, the Baltimore and Ohio, the Baltimore and Susquehanna in Maryland, the Petersburg and Roanoke in Virginia, the Charleston and Hamburgh in South Carolina, the Newcastle and Frenchtown in Delaware, the Camden and Amboy in New Jersey, the Hudson and Mohawk, and the Schenectady and Saratoga railroads in New-York, and in our own State the Philadelphia, Germantown, and Norristown railroad, and the Little Schuylkill railroad,—on almost all of which horse power was at first used, and on which it has since been in part, or wholly, replaced by locomotive engines with great advantage. It is understood that on all these roads, engines will be used exclusively in preference to horses as soon as the necessary arrangements can be made to dispense with the latter.

Upon this point the committee are also permitted to refer more at large to the experience obtained on a road in this Commonwealth, upon which a large trade was carried last summer, and experiments carefully made, with a view to ascertain the comparative expense of transportation by engines and by horse power, and in which there was a decided advantage in favor of the former, even after making large allowances for the expense of repair to the road and of deterioration to the engines. Although the committee would not feel themselves at liberty to exhibit, in a report of this kind, facts which were communicated to them for their own information, in relation to the operations of a private company, they are enabled to state that, after making all reasonable allowances, the expense by horse power is at least one-third greater than that by engines, and that after the improvements suggested by experience shall be introduced, the economy will probably be much greater. The road does not suffer materially from the use of the engines, and the transportation is more regular, systematic, and under control.

The opinions of experienced men have been obtained upon this point, and while it would be easy to adduce the authority of many persons, they will be satisfied with referring the House to the letter of Moncure Robinson, Esq., addressed to a committee of this House last year, and which is attached to this report, and to the opinion of the canal commissioners, as expressed in a special report lately made to the Senate.

The single item of economy in the making and keeping in repair of the horse-path, is an object worthy of attention. The making of the horse-path on sixty miles of double track is estimated by the canal commissioners at eighty-five thousand dollars; and the annual expense of repair of horse-path is estimated by Mr. Gay at three hundred dollars per mile per annum, or a yearly expenditure of upwards of twenty-five thousand dollars, which will be rendered entirely unnecessary by the use of steam power.

Nor is there any reason to apprehend that the curves on the Columbia railroad will interfere with the security of engines, as the curves between the two planes are larger than those on other roads upon which such engines are successfully used.

The next inquiry is, whether they should be considered as high roads or not? The committee come to the conclusion, that the high way principle is entirely inapplicable on a road upon which a large trade is intended to pass, and that the exclusive use of locomotive engines makes it inexpedient as well as improper to open it as a high road. Upon this point, the committee are aware that an impression has existed with many, that the high way principle is the old and established system, and that the attempt to restrict it is an innovation. This is entirely an erroneous impression. If railroads were in every respect analogous to turnpike roads or canals, the opinion might be correct; but differing as they do entirely in their construction and use, the position is untenable. We are, on the contrary, justified in asserting, that no railroad of any great length, or of great travel, has ever been so considered. In England all the railroads in use, except the Surry and Croydell, are used exclusively by the companies that own them. It has not been in our power to procure the charters of many of the railroad companies of this State, but we can cite many in which the exclusive principle is distinctly admitted; and these will be found to include most, if not all those which are now extensively used: such, for instance, as the Baltimore and Ohio, and the Baltimore and Susquehanna railroads, the Newcastle and Frenchtown, the Petersburg, the Chesterfield, the Charleston and Hamburg, the Mohawk and Hudson, the Saratoga and Schenectady, &c. Moroever, the same principle is distinctly recognized in the Mad River and Lake Erie railroad company's charter, and in several others before us. We are, therefore, warranted in the assertion, that the legislation, not only in Great Britain, but also in New-York, Ohio, Delaware, Maryland, Virginia, and South Carolina, distinctly recognise the impossibility of admitting the high way principle. The committee refer the House to the previously published opinions of the canal commissioners, of Mr. Gay, &c. and would chiefly invite the attention of the House to Mr. Robinson. In practice there is no road of any length which has been found to answer on the high way principle. The best instance is unquestionably the Minehill and Schuylkill Haven railroad, whose length however is only ten and a half miles; and which being used only for a descending coal trade, horse power offers no analogy with a great State improvement like the Pennsylvania railroads. In England, we know of but one road that is a high way—it is the Surry and Croydell, which is a tram road, (not a railroad,) and which has never been either productive or valuable.

On the high way principle it would be impossible to secure a constant, expeditious, and cheap transportation for all goods coming to Columbia. Transporting companies might probably be formed, who would attempt to carry the whole produce from Pittsburgh to Philadelphia, and whose object and interest it would be to drive off all competition. The great out-lay of money required to keep up a constant line of engines and cars on the road, would soon throw the business into very few hands, over whom there would be neither check nor control. All the evils of a monopoly would exist, without any of its advantages—while all the evils of competition might still continue; an occasional understanding between companies would produce great fluctuations in the prices of freight and transportation, coming on suddenly and taking the distant unawares. This is not a gratuitous supposition—we have seen

these fluctuations upon every high way in the United States. The accidents which occasionally occur on our turnpike roads, by the racing of stage coaches, would recur with the more frequency on our railroads, on account of the greater dangers resulting from carelessness or inattention. The strictest police could not guard against them; as it would be impossible to determine, with precision, the causes of accidents, and the persons through whose agency they had occurred. Instances might be mentioned, from the personal experience of your committee, in which trains of cars travelling in the same direction, on the same road, and belonging to the same owners, have, by the inattention of their drivers, been suddenly brought into contact, occasioning loss of property and death to horses, or damage to engines. Such cases are more likely to occur where the property would be owned by different individuals.

An attempt at a strict police, on a high way, would be in truth ineffectual; but it would be attended with a great deal of petty litigation, of heart-burning, or real or alleged injustice or oppression.

By placing the business under one management, the utmost economy could be obtained; and of course the trade of Pennsylvania would be benefitted, and the travelling on the road greatly increased.

Having come to the conclusion that the use of horses ought not to be permitted, and that the highway principle is inadmissible; the committee proceed to inquire, in the third place, by whom should the motive power be owned? Two plans have been offered, both deserving of great consideration. The one, to place it in the hands of the agents of the State; the other, to farm it out to contractors. At the first blush, it would seem that the former were the more desirable. It strikes the attention, as the fairer and the more efficient mode: that which keeps the control of the road most in the power of the State. If there must be a monopoly, all would be disposed to yield it rather to the State than to an individual. But the advantages are rather apparent than real—the plan is more plausible than substantially good. On the continent of Europe all agencies of an analogous character are in the hands of government. In Great Britain they have with more propriety been placed in those of a contractor; and in this country we have, in cases nearly parallel, found great advantage in farming out such undertakings. No better instance can be found than in the post-office department. It was at one time thought, and we believe attempted, to have the mail transported entirely by the United States. It was soon found, however, that all the advantages resulting therefrom would more readily attend short contracts, say for 4 years. There is more economy. Individuals working on their own account, under a strict supervision, are obliged to pay more attention to it than could be obtained from salaried officers. The difficulty of the selection of proper officers, the dangers from an increase of patronage, the want of a balancing or checking power to prevent injustice, are among a few of the evils incident to the conferring this duty upon salaried officers. For such men, there would be no motive (exclusive of a sense of duty) to produce an increase of travel on the road; since the more frequently it was used, the greater would be their duties, without any additional compensation.

With a contractor, the case would be different. To him the increased travel or transportation would be a source of increased gain. It would be his duty to procure assistance on the best terms, and of the best kind. His own interest would soon satisfy him that no imperfect cars or engines, no new and untried inventions, green from the brain of the inventor, could be advantageously applied on such a road. In the hands of such a contractor, it would become a matter of business, not experiment. Closely superintended in the execution of his contract, by a proper officer appointed by the canal commissioners, under the sanction of the Governor, there would be every desirable security for the proper use of the road. The State engineer would act as an umpire between the public and the contractor, and his decision might be with or without appeal. In order to make this plan unexceptionable, it merely requires that the duties of the contractor should be carefully pointed out to him, and that the execution of the contract should be strictly enforced. The amount to be charged per ton per mile, for all kinds of goods, being specified in the contract, and he being bound to carry it for all on the same terms, a maximum price of transportation might be obtained, advantageous to the whole state. Having the exclusive use of the road, it would be made his duty to keep a register, in which all goods should be entered, in the order in which they were presented for transportation; and he should be bound to transport them in the same order, and within a certain time fixed in the contract; which would insure impartiality and celerity to the transportation of goods. Any neglect or omission would be reported to the engineer, whose duty it would be to see justice done and the contract duly executed, or the penalties thereof enforced.

There is in such a contract, offered to the highest bidder and open to all applicants, no injustice or hardship to the community at large. It is consulting the public good, to establish such regulations as will make the road most useful. Such a contract would be analogous to a mail contract, of which no one complains as an arbitrary measure of government. There is as yet no common law in relation to the use of railroads—there can be no rights acquired at common law to provide for. The State has made a railroad at an immense expense, and has a right to say in what manner it shall be used.

4. The next question is, by whom the cars should be owned? It has been recommended, and from respectable sources, that while the motive power could not be in the hands of every one, the cars might be owned by individuals. This the committee regret to dissent from. Nothing could be more unjust, than to throw either upon the Commonwealth or upon individuals, the expense of dragging cars which were not made of the best materials or in the best manner. Any one acquainted with railroads and cars must know that the power required to draw one car, sometimes is two or three times as great as that required for a car of apparently similar construction, and coming out of the same shop. If the cars belong to the owner of the motive power, it will be his interest to find out and correct the deficiency of the hard running car—but if they belong to individuals, no such interest exists; and provided the inspection on the road can be passed, each will be anxious to make cars after his own peculiar notions of economy or fitness. The inspection of a car, when finished, is not an easy thing—nor can it be a satisfactory one, unless it be taken to pieces. It must be an inspection of parts; an inspection of materials before they are used; an inspection of workmanship as it proceeds in the shop, which can alone insure a good running car. If the owner of the motive power also own the cars, he may have his own shops, his own foremen, and insure a proper construction of cars.

Again, nothing is more injurious to a road than a badly running car. It may press against the curves—it may injure the rails, &c. If the cars belong to the owner of the motive power, the inspection and control of the state engineer becomes easier and more effective; but if his attention be divided by numberless petty workshops along the road, his superintendence must of course be less efficient. Again, suppose an accident occurs in the breaking of an axle or wheel, on the road, while travelling at great rapidity with steam power, on whom is the loss to fall? It may have resulted from the wilful use of inferior, but cheaper materials, which the sordid economy or ignorance of the maker of a car may have told him was "strong enough" for the purpose, while no other person would have thought of using it. Such accidents may occur—much property may be injured—lives may be lost—the road materially impaired—while the unconscious individual was merely trying an experiment as to the sufficiency of some iron in his shop.

If the cars belong to the owners of the motive power, there is a remedy. Let him be made, by his contract, the insurer for the safe delivery of all goods entrusted to his care—the insurer against all risks whatever, whether from accidents of the engines, from combustion of the goods, from damages by the breaking of cars, from robberies or neglect on the road. It will be his interest then to avoid such accidents.

Such are general principles which in the opinion of the committee should guide in making a contract of this kind. The duration of the contract is a matter of doubt; they have fixed it at the shortest possible period, say three years, with a clause, that if at the expiration of that time a new contractor should outbid the former, or if the state should refuse to continue to let the road out, then the new contractor or the state should be bound to take the property in the possession of the contractor, such as engines, cars, &c. at a fair valuation or appraisement, if he should so require it. Such terms are in all mail contracts, and present no novelty.

Were the road finished and of established character, and could we hope to get at once good proposals for it, the committee would cheerfully have extended the lease; but as the first term must necessarily be an experimental one, it has been thought best to make it as short as possible, consistent with obtaining any bids. The committee doubt not that there is already forming, in this country, a class of men experienced in the use of railroads, who, backed by some friends, will become regular bidders for such contracts hereafter, in the same manner that a class of experienced and respectable mail contractors has been formed in every part of the country. While we admit the propriety of having almost all public works done by contract, as being the cheapest, most satisfactory manner, the committee do not see why the use of railroads alone should be exempted from this system.

The bill which they herewith report, differs but little from that reported by a select committee, and which passed this house last year, but was lost in Senate, from the lateness of the season.

It makes it the duty of the Governor to advertise for proposals, and should he receive satisfactory ones, to execute a contract for the use of the road, with the highest and best bidder—the terms of the contract to be previously prepared by an experienced engineer, to be appointed by the canal commissioners, and to be thrown into proper legal form by the Attorney General; the whole being revised and approved of by the Governor. Should the Governor, however, receive no satisfactory bids, (of which he is left the sole judge,) then he is to appoint one or more agents of transportation, whose duty it will be to provide the necessary engines, cars, &c., and attend to the transportation, on such terms as the canal commissioners, under the direction of the Governor, shall fix and determine.

In the meanwhile, the bill authorizes the canal commissioners to consult some experienced railroad engineer, as to the location of water stations, warehouses, &c., and under his direction to cause the same to be erected; and also authorizes them to purchase or contract at once for the manufacture of six locomotive engines, to be completed as soon as possible, and which, when completed, they are to transfer to the contractor at cost, should any contract be made.

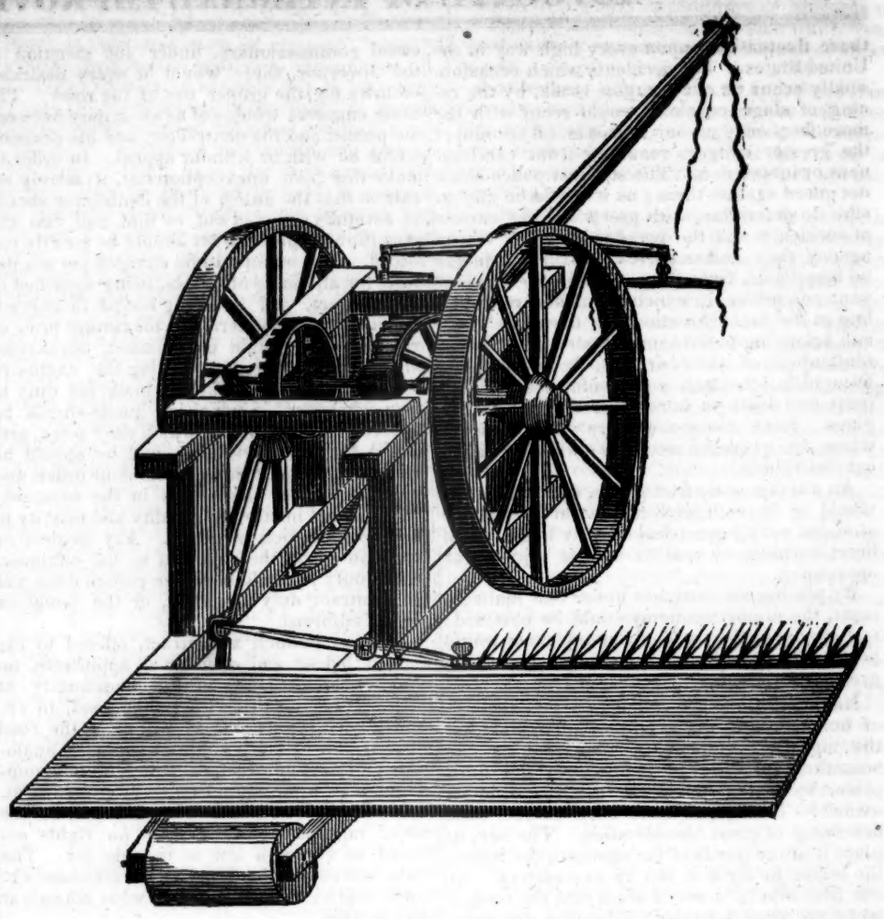
The committee were aware of all the difficulties with which the subject is beset, and they have endeavored to steer clear of the most

formidable ones. They have trusted to experience, wherever its results could be obtained. They have consulted the most eminent engineers in the country, and they now submit the whole subject to the Legislature, conscious that as no perfect scheme can be advised at first, it is best to adopt, in the outset, such a plan as, in its future modifications, will involve least sacrifice of private property, and fewer claims for remuneration for damages to the same.

AGRICULTURE, &c.

Description and Drawing of Hussey's Grain Cutter. Communicated by the INVENTOR.

[We have seen one of Mr. Hussey's grain cutters, manufactured in this city by Messrs. R. Hoe & Co. It is a simple, substantial machine, and from its construction and the perfect manner of cutting a little artificial field of grain, we would add our own recommendation to that of the respectable names in the certificate. The inventor is about taking it into the grain regions of the western part of the state, to exhibit its operation at the next harvest.]



This machine consists of a frame of good oak or ash, sustained by two wheels forward, and one wheel or roller in the rear, and is constructed in the following manner: Two sills are connected by several cross rails; on these sills are fixed four posts; two top rails are framed to the tops of the posts, parallel with the sills, and connected also with cross rails, as seen in the plate. To the forward posts is hung the main axle, with journals running in metal boxes: on this axle the wheels are fixed with square boxes: these wheels sustain the forward part of the machine, and furnish the cutting power. Across the rear ends of the sills is fixed a plank floor of good pine, extending several feet beyond the right wheel. This floor is horizontal, and its distance from the ground will be the length of the stubble. On the front edge of this floor is fixed a row of iron teeth, pointing forward horizontally, forming a comb: the teeth are formed of two parts, one part above and one below, and joined at the points, forming a range of mortices, through which runs a saw with the teeth sharp on both sides: this saw is moved by a crank which receives its motion from the main axle.

Two horses are attached to the machine and driven on the stubble, when the teeth are presented to the standing grain, which they receive between them, as the saw with a quick motion cuts it off, the morticed teeth forming a bearer above and below the saw. The velocity of the machine, while cutting, gives an impulse forward to the butts of the straws, causing the grain to fall backwards on the floor. As it accumulates on the floor, it is deposited or pushed off in heaps with a rake formed for the purpose, by the operator, who rides on the machine.

H. Huxley & Co., 81 Barclay st. New-York, are agents for selling the above machine.

This may certify, that we, the undersigned, members of the Agricultural Society of Hamilton county, state of Ohio, at the request of Mr. Obed Hussey, attended an exhibition of a machine for cutting grain by horse power, invented by him. The experiment was performed at Carthage, in this county, about the first of July last, before a large company of spectators, composed of farmers of the neighborhood, the citizens of Carthage, and several from Cincinnati, who appeared to be united in the expression that it was a valuable improvement in agriculture. In our opinion the experiment was completely successful, although several impediments occurred during the exhibition by the breaking of some weak parts; these obstructions were plainly to be attributed to the imperfect manner in which the machine was made, it being a first experiment, and experience not having yet taught how to proportion the strength of the several parts to meet the stress which each part might be subject to, on its trial, some pieces being of wood, which should have been of iron; but we have no doubt but all these imperfections can be remedied in a second machine. We were satisfied that the impediments referred to were not to be ascribed to any defect in the principle, for, while the machine was in operation, the performance was complete, until some part broke by the violence to which it was subjected, it having two horses attached to it, and they several times driven on a brisk trot; at this speed the grain was cut as well, or better, than when the horses were driven slow. The machine performed well, both at the rate of two and a half and five miles per hour; and although the horses were several times urged, they were not driven so fast at any time as to determine at what speed the machine might be moved, and do good work. The wheat was found to be cut much cleaner, and to be left in better order for binding, than when cut by the cradle. The saw which cuts the grain was made without a temper for cutting, consequently would not continue sharp long at a time; but no difference was perceived in the execution, the grain being cut equally clean, and fast, whether the saw was dull or sharp. This was attributed to the peculiar construction of the cutting apparatus. With regard to the quantity of grain which the machine is capable of cutting in a given time, we can only say, that we saw the machine move at the medium rate of three and a half or four miles per hour, cutting a swarth five feet three inches wide; and we have no doubt but the machine may be extended with advantage to a half a rod in width on ordinary smooth ground. In this case the machine would pass over one acre in going the distance of one mile. From the general satisfaction expressed at the exhibition alluded to, and our own impressions, we would recommend Mr. Hussey's grain cutter to the notice of all grain growers, being satisfied ourselves, that if future trials should equal the first experiment, it will be a valuable improvement to all large farmers.

D. C. WALLACE, Sec'y of the Hamilton Co. Ag. Soc.
J. D. GARRAND,
CALVIN CARPENTER.

I was present at the exhibition of Mr. Hussey's grain cutter, and concur in the statement of D. Wallace and others. The impediments referred to by them were in one instance caused by the loosening of a cog wheel by loss of the wedges, the other by the breaking of a two-inch wood screw, where a strong bolt should have been used. But for these two casualties, I am of the opinion that the machine would have performed without interruption. The performance of the machine while in operation was complete and satisfactory. I have since that time seen a machine on the same principle, constructed by Mr. Hussey, in a strong and durable manner. I have no hesitation in recommending it to be a valuable improvement.

T. B. COFFIN.

[*From the New York Farmer.*]

LANDSCAPE GARDENING.—From the Report of the Visiting Committee of the New-York Horticultural Society for 1828, we make an extract. The subject still needs the encouragement of the Society.

"With regard to landscape gardening, the Committee have to report that, from the examination which they were able to make in the vicinity of this city, they are of opinion this part of horticulture is yet in its infancy among us as an art. The art of laying out grounds, so as to display all their beauties and conceal their defects, is a subject of much interest in Europe, where large sums are expended in embellishing the grounds surrounding the dwellings of the proprietors. There the profession of landscape gardener is common, though almost unheard of among us; a pro-

fession requiring the practical gardener's skill, with a knowledge of the qualities and nature of forest trees, their capacity for picturesque effect, either separately or in groupes, a correct taste in selecting natural or creating artificial beauties, and a practised eye in discriminating the varied features of natural scenery. With these qualifications, the landscape gardener has tracts of land of considerable extent and diversity to operate on, assisted by all the resources which the wealth and taste of the proprietor can supply. The grounds attached to the country residences of our citizens are usually too limited to give much opportunity for the display of this style of gardening, and are generally appropriated to the more useful and profitable purposes of the kitchen garden, or the orchard, a small portion near the dwelling being reserved for parterres. There are, however, many beautiful sites in the neighborhood of our city, particularly those which border on our waters, in which a fine effect might be produced, by a proper application of the principles of this branch of horticulture. For improvements in this, as well as in the preceding departments, we must depend upon the greater diffusion of wealth among us, and the consequent greater leisure and opportunities for devotion to the pleasures of such pursuits. It is the legitimate province of our society to accelerate the progress of improvement in this respect; and the committee would beg leave to recommend the subject to their attention, as worthy of the same encouragement which the Society offers to the other branches of horticultural skill. A. Halsey, Chairman.

"New-York, January 27, 1829."

Maple Sugar.—We give the following on this subject, although for the present the time for making the sugar will be past before this number reaches our subscribers:

"In the northern and western sections of this state, particularly in the counties of Jefferson and Lewis, the inhabitants are very laudably engaged in transplanting these trees into orchards, and along the lanes and roads. In the town of Lowville, one farmer has an orchard of six hundred trees. Those growing on low, wet lands, are not as productive of sugar as those on upper lands. The latter may be known by the roughness of the bark, and by growing to a larger size.

"The trees are tapped when about eight or ten inches in diameter, and will, at this period, produce from three to six pounds of sugar each season. Very large trees have been known to produce fifteen pounds. The sap or juice of these trees may be converted either into sugar or well flavored molasses. The best method of obtaining the sugar is to have the buckets perfectly clean; and when sufficient quantity of the sap is collected for boiling, it should be strained through a woollen cloth into the evaporator. The best evaporating vessel should be about four by six feet long, and eight inches deep; the bottom of sheet iron, and the sides of wood, set in mason work, so as to protect the sides from injury by fire. The advantages of this construction are, rapid evaporation, by having the surface of the fluid very great in proportion to its depth, consequently a saving of fuel, and preventing that blackness which is communicated to the sugar when boiled in a vessel entirely of iron. After the fluid is boiled to the consistence of West India molasses, it is allowed to cool, and then strained through fine flannel. It is again put over a gentle fire in a clean vessel, with a quantity of fresh blood well mixed with it. The blood will coagulate, and rise with the impurities to the top, which are carefully skimmed off. After this, a slow evaporation is kept up, taking care not to burn the sugar, until it is sufficiently done to granulate, which may be known by its granulous effect on the tongue. Most people, however, have various and peculiar methods of ascertaining its crystalline state. It should now be removed from the fire, and stirred until cool, when it will be composed of large sparkling grains. The sugar made by this process is found to be far superior to that made in the common way of running it into moulds or cakes, and is susceptible of high refinement."

Asparagus.—There are several varieties of the garden asparagus, as the large German, the red and green topped, the Battersea, Dutch, large Reading, &c. The large German red, and green topped, are considered preferable.

Asparagus is propagated from seed, but is often increased by offsets from the old roots. Beds are thought to succeed best when set with young seedling plants; but the shoots will not be ready for use as soon as when set with offsets. The seed should be sown early in May, on a bed of light rich garden soil.

They may be sown quite thick, and allowed to grow in the bed one summer.

In the fall, or early in the spring, a bed should be formed in some part of the garden, where it is intended it shall remain, by trenching it eighteen inches deep, and mixing with a suitable quantity of manure. Some prefer beds of only two and a half feet wide, calculated for two rows, set at eighteen inches distant; others form their beds four feet wide, and set three rows at the same distance. But of whatever width the beds are made, the roots should be placed at least eighteen inches distant from each other, and should be placed nearly on a level with the walks between the beds. After the roots are placed upon the beds they should be covered over about four inches deep with fine loose mould. The first year after setting, asparagus should be allowed to grow without cutting, and in the fall, after the frost has killed the tops, they should be cut off, and the bed covered over three or four inches thick with stable manure. In the spring following, the manure should be made loose with a fork, but allowed to remain upon the bed, that the young shoots may be blanched a greater length. The soil and litter should ever be kept six or eight inches thick over the crown of the roots. When good strong plants are set they will produce shoots fit for cutting the second year after setting. The young shoots may be cut until the middle of June, after which they should be allowed to grow up for seed. In selecting plants for setting, none should be used which have not a good crown or bud, as the lateral roots, or those destitute of buds, will not sprout, although they will remain in the ground many years without rotting.

In cutting asparagus, care should be taken not to injure the buds upon the crown, which are close to the lower end of the shoot; for this purpose a knife with a narrow point should be used, which should not be allowed to go as deep as the buds. When a bed of asparagus is well planted, it will continue to produce well for twelve or fifteen years, and when it is found that the shoots decrease in size, a new bed should be formed before the one is taken up, that the family may be constantly supplied with this wholesome vegetable.—[Goodsell's Genesee Farmer.]

Grafting and Setting out Trees in the same Season.—In the spring of 1830, I bought thirty trees of a different size to set in my orchard. In digging up the thirty large ones, we dug up a considerable number of small crooked things that were not worth any thing to the owner; I therefore obtained about sixty from the nursery. They were of all sizes, from the bigness of a pipe-stem to that of a man's thumb. I carried them home and put them in a barn. The next day being rainy, I went to work and grafted them. As soon as it was fair weather, I had them set out in rows, each kind by itself. The result was, that upwards of fifty grew and did well. The large ones were set out, and I engrafted them; some the same day, and some a few days after, and they did as well as any scions that I ever set.

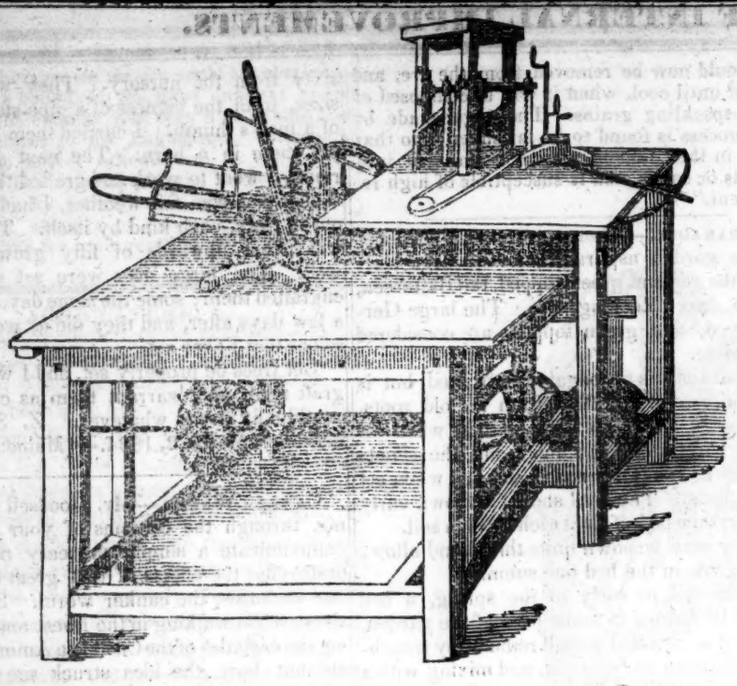
Let trees be properly set, and I would then graft them and warrant them as cheap as I would any trees whatever. Z. Sargent. Gardiner, March 2, 1834.—[Maine Farmer.]

Canker Worms.—Mr. Goodsell: Permit me, through the columns of your paper, to communicate a simple and easy method of destroying the effects of that great enemy to our orchards, the canker worm. Six years since, while walking in the forest and examining the capsules of the Castanea Americana, or chesnut burr, the idea struck me that they might be applied to advantage in preventing the effects of the canker worm. I took a piece of strong twine and sail needle, and made a band of them, placing all the backs one way, which caused the spines to project in all directions; I tied it round the trunk of an apple tree in the centre of an orchard that was much injured the year before, which bore abundantly without the leaves being injured in the least, while those around were all ruined for that year.

I have since tried it several times with entire success. A set of bands will last many years if taken off when the insects have done ascending, and secured in a dry place. I have usually put the bands on the trees about the middle of March.

In sections of the country where chesnut burrs are not easily obtained, I would recommend the use of the dipsacus fullonum, or fuller's teasel; although I have never tried it, I have no doubt it would make a sufficient barrier to prevent the ascent of the canker worm. Nathan Ruggles. New-Haven, (Ct.) Feb. 26, 1834.—[Goodsell's Farmer.]

To prevent Beer from becoming Acetous.—There is a way to prevent beer from getting acetous, or what is called hard, which is as simple as it is efficacious. Reasoning on the plain principles of chemical science, we were led to try it, and have this summer found its truth and advantage. It is nothing more than to suspend a knob of marble by a piece of tape from the bung hole to near the bottom of the barrel, upon which, being pure carbonate of lime, the acid quality of the beer acts on its incipient formation: it consequently becomes neutralised, and thus is kept from turning hard or sour. In our experiment the marble was considerably eaten away, except where the tape encircled, and the beer remained sound and fresh to the last drop. We mention this discovery as being a point of some consequence to householders, and especially to farmers and their laborers in harvest time; for it is more likely that weak beer should become sour than strong; it is much more healthy to drink it fresh than ever so little turned off, and, in the way of economy, many barrels might be saved, which are every year thrown into the hog-tub from becoming undrinkable. It will do good, however, to every species of beer, and, we expect, to any kind of home-made or even foreign wines in cask, which have or are likely to become tart or sour.—[Oxford Journal.]



HAMILTON'S SAWING AND BORING MACHINE.—This machine is designed for sawing and boring wood or timber, and is claimed by Colonel Hamilton in his specification to be "*an improvement in the mode of sawing felloes of wheels, circular and curved segments*, mitre joints, tenons, and also boring of felloes and hubs of wheels;" and generally for sawing circular, curved, and plain surfaces.

The machine is propelled by a two horse power steam engine. Animal or water power may be applied for the same purpose. The particular form required is sawed out of the timber with perfect accuracy and great expedition, by means of one or more thin narrow saws moving up and down. There is also belonging to this machine a horizontal saw for cutting segments of circles their proper lengths, and with proper inclinations for joints, tenons, &c. &c. Hubs of carriages are bored with perfect precision. All these operations are effected by the changing position of the material, accommodating itself as it comes in contact with the saw or auger, so as to receive the exact form, inclination, &c. required. Every thing is done, without marking or laying out, with mathematical accuracy by means of scales, which are distinctly laid down on the machine.

The machinery which guides and steadies the material in its movements may be readily varied, so as to form segments of wheels of greater or less dimensions; and the boring may also be more or less inclined. The scale indicates the exact position which the part of the machine that guides the material required to form a wheel,—for instance, of greater or less circumference. Slats and legs of chairs may be made of various lengths, and thicknesses, and shapes, as fashion or utility may dictate.

This machine affords a happy specimen of labor saving, and may be advantageously applied to a variety of useful purposes. It occupies but little space, only a part of a small room. No skill is required in using it. A mere laborer, or a boy, can learn in a few hours to use the machine, and to produce the article as perfect as the most skilful machinist. Like many other labor saving machines, it performs that part of the labor which the accuracy and strength of the human hand are incompetent rapidly, and with precision, to perform; it, in fact, does the work which is the most difficult and toilsome to the laboring manufacturer.

The expedition with which materials of small value, and with very little waste, are converted into articles of comparatively much greater value is entitled to particular notice. Chair backs sawed from our native curled maple are worth from *eight to twelve and a half dollars* per hundred.

By the aid of this machine, which costs only about *three hundred dollars*, a common laborer may do the work of twenty or thirty mechanics. The merit claimed by Colonel Hamilton consists chiefly in the facility and accuracy with which the material is adapted to the saw, so as expeditiously and uniformly to produce the exact form which is wanted.

METHOD OF DRESSING SKINS PRACTISED IN MAROCCO.—The following account of the method practised in dressing skins in Marocco was transmitted to the Zoological Society by W. Willshire, Esq., a Corresponding Member of that Society, in a letter dated Mogadore, May 5, 1838. Its results are stated to be excellent, as regards the preservation and color of the fur, and the flexibility of the pelt.

Wash the skin in fresh water to deprive it of the salt; as soon as this is done, scrape the flesh off, when take two pounds of alum, one quart of buttermilk, and two or three handfuls of barley-meal, which mix well together, and lay on the fleshy side of the skin equally; fold up and press it together carefully, and let it lie two days. On the third day take it to the sea-side, wash the skin well, and when clean and free from mixture, hang it up to let the water run from it: then take two pounds of alum finely powdered, and throw or spread it equally on all parts of the skin; again fold up as before, and allow it to lie three days, when it will be in a proper state to dry in the sun, laid flat, without taking away the powder. When it is dry, take a pint or two of fresh water, and sprinkle it upon the skin, and again fold it up carefully for about two hours, to imbibe the water; then lay it on a table, and, after scraping it free from the mixture and flesh, take a sand-stone (rather rough) and rub the skin well until it becomes soft and pliable, then hang it in the shade to dry. The process is then complete.

When the skin is perfect, having the head, horns, &c. take off the horns, and fill their cavity with a mixture of equal parts of powdered alum and ashes of charcoal dissolved in water, and expose them two days to the sun. Saturate the trunks of the horns with eight ounces of alum dissolved in water, and fold up with the skin, and apply the same on each occasion when employed in curing the skin. The flesh on the head and jaws to be carefully taken off, filling the same with powdered alum. It should remain in the sun until perfectly dry.

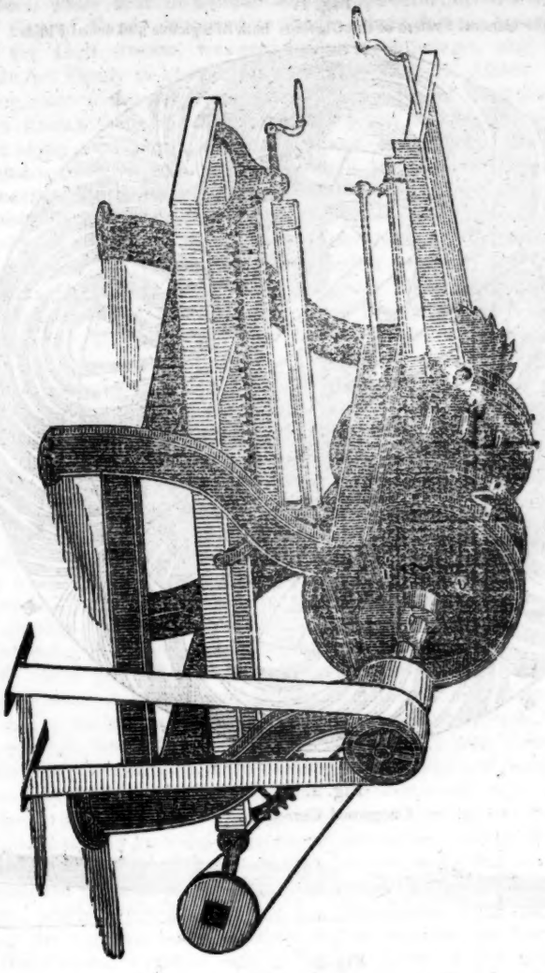
In addition to the foregoing description of the mode used in Marocco, in dressing skins, as related by the persons employed by Mr. Willshire, it may be well to observe that the process does not take so long at Mogadore, as Mr. W. has often received back skins of the Aoudad and Leopard from the dresser, on the third or fourth, and never exceeding the fifth day, perfectly cured. Allowance has been made by the dresser, in the foregoing description, for the difference in the climate of London.

The skins of smaller animals must not be subjected to so lengthened a process, or they will become harsh, and the pelt impoverished. —[Proceedings Zoolog. Soc.]

THE PRESS IN CHINA.—There is but one journal in the Chinese language in the whole Chinese empire; it is published at Pekin, and is called the *King Pao*, or "Messenger of the Capital." It contains all the ordinances submitted to the Emperor for approval by the six ministers of Pekin, and the various authorities of the provinces, as well as by the commandants of the military corps. The amount of subscription is a liang and an ounce of silver (about equal to twelve francs) per annum. The inhabitants of the capital alone have the advantage of receiving the paper every day at a regular hour; for, as China has no such establishment as a post-office, the country subscribers get their papers only as occasion may favor; consequently, those living at a considerable distance from the capital receive them very irregularly.

CAUSES OF INDIGESTION.—Among the chief causes of indigestion (says Dr. Wilson Philip, in his treatise on this disease,) which act directly on the muscular fibres of the stomach, are narcotic and other offensive substances received into it. I have found that although opium applied to the external surface of the alimentary canal and heart produces no sensible effect on their muscular power, applied to their internal surface, it produces the same effect as when directly applied to the muscular fibres themselves, impairing their power, unless the quantity be extremely minute, and instantly destroying it if the quantity be considerable. It is probable that other offensive substances acting on the stomach—tobacco, distilled spirits, strong peppers, those of an acrid or putrid nature generated in the stomach itself, &c., may also in the same way immediately affect the muscular fibres. It is not uncommon for a fit of indigestion to be induced by taking suddenly considerable quantities of iced fluids. Violent and repeated vomiting also debilitates the muscular fibres of the stomach. But of the causes which immediately affect them, the most frequent and powerful is morbid distention, the most common cause of which is eating too fast; another frequent cause being high seasoning and great variety of food, or such as particularly pleases the palate, by which we are induced to eat after the appetite is satisfied.

WISWALL'S YOKE CUTTER FOR DRESSING SPOKES OF WHEELS.—By means of a circular saw operating in connection with the cutter wheels, the timber is squared and cut to any length that may be required, and the tenons of the spokes are then formed of any required dimensions. The spoke being presented to the action of the first cutter, or ten-



on wheel, by hand, the tenon is formed in less than a minute, and the body of the spoke is dressed into shape and smoothly finished, first on one side and then on the other, by two operations, in another minute, more perfectly than it could be by any mere hand tool, though used by the nicest operator. No means of forming the round tenon which is to be inserted in the rim was exhibited. This, it is obvious, must be effected by a fourth operation. The whole machine is evidently capable of a more perfect construction than that examined by the committee; but such as was exhibited in operation is evidently a useful improvement, and a labor saving machine of great profit. It saves all the time which an operator by hand necessarily expends in judging by his eye of the exactness of the shape given, and to be gained by his tool, and may be operated in artificial light, when the laborer by hand would be scarcely able to judge of his own work. There is therefore much gained by the art of making wheels, which artists in that branch of mechanics will find profitable to themselves, as they can employ their journeymen more usefully on other parts of the wheel, and in adjusting them to each other.

Every Nerve appropriated to its Function.—From this law of our nature, that certain ideas originate in the mind in consequence of the operation of correspondent nerves, it follows—that one organ of sense can never become the substitute for another, so as to excite in the mind the same idea. When an individual is deprived of the organs of sight, no power of attention, or continued effort of the will, or exercise of the other senses, can make him enjoy the class of sensations which is lost. The sense of touch may be increased in an exquisite degree; but were it true, as has been asserted, that individuals can discover colors by the touch, it could only be by feeling a change upon the surface of the stuff, and not by any perception of the color. It has been my painful duty to attend on persons who have pretended blindness; and that they could see with their fingers. But I have ever found that by a deviation from truth in the first instance, they have been entangled in a tissue of deceit; and have at last been forced into admissions which demonstrated their folly and weak inventions. I have had pity for such patients, when they have been the subjects of nervous disorders, which have produced extraordinary sensibility in their organs—such as a power of hearing much beyond our common experience; for it has attracted high interest and admiration, and has gradually led them to pretend to powers greater than they actually possessed. In such cases it is difficult to distinguish the symptoms of disease from the pretended gifts which are boasted of. Experiment proves, what is suggested by anatomy, that not only the organs are appropriated to particular classes of sensations, but that the nerves, intermediate between the brain and the outward organs, are respectively capable of receiving no other sensations but such as are adapted to their particular organs. Every impression on the nerve of the eye, or of the ear, or on the nerve of smelling, or of tastes, excites only ideas of vision, of hearing, of smelling, or of tasting; not solely because the extremities of these nerves, individually, are suited to external impressions, but because the nerves are, through their whole course, and wherever they are irritated, capable of exciting in the mind the idea to which they are appropriate, and no other. A blow, an impulse quite unlike that for which the organs of the senses are provided, will excite them all in their several ways; the eyes will flash fire, while there is noise in the ears. An officer received a musket ball which went through the bones of his face: in describing his sensations, he said that he felt as if there had been a flash of lightning, accompanied with a sound like the shutting of the door of St. Paul's. On this circumstance, of every nerve being appropriated to its function, depend the false sensations which accompany morbid irritation of them from internal causes, when there is in reality nothing presented externally; such as flashes of light, ringing of the ears, and bitter tastes or offensive smells. These sensations are caused, through the excitement of the respective nerves of sense, by derangement of some internal organ, and most frequently of the stomach.—[Bell's Bridgewater Treatise.]

Arabian Horse.—Perhaps the most remarkable point about the Arabian horse is the extraordinary smallness of the head and mouth,—so small, indeed, is the latter that you would think they might use a common tumbler for a water bucket.

Observations on the Prevailing Currents of the Ocean and their Causes. [From the United Service Journal.]—Continued from p. 216.

In considering the origin of the currents of the ocean, it must be kept in mind that they proceed from two distinct causes, and thus exhibit one of the most wonderful and provident effects to be seen in the order of the works of the Creator. Water and air, if left stagnant, soon become corrupt and unwholesome; and it is evidently a wise provision of the Almighty, which has furnished the laws by which a constant circulation and movement are kept up in both. In the case of the atmosphere, the circulation occasioned by the *winds* takes place, partly by means of the revolutions of the earth on its axis, and partly by the expansive nature of air when affected by the heat of the sun. The lower beds of the atmosphere are elevated into the higher regions by heat; and other portions of the fluid, rushing in to fill the vacuum, occasion streams of wind of various degrees of force. The seasons of the year, and the duration of the effects of summer and winter in various latitudes, also occasion similar currents of air more or less durable, according to circumstances. But in the case of the currents of the ocean, there are but two causes from which constant currents can primarily arise: one from the rotatory motion of the earth, from *west to east*, which causes an *apparent* current from *east to west* in the open seas near the equator; the other cause arises from the inclined position of the earth with regard to the sun, by which a greater *evaporation* takes place from the waters of the sea within the tropics, than in the more temperate and frigid zones; and on the other hand, a proportioned *condensation* of this vapor (in the form of rain, dew, and snow,) takes place in the latter regions, greatly superior in quantity to what falls, during the whole year, in the former. These effects of temperature are so vast, when viewed upon the scale of the whole earth, that the balance of the ocean would be deranged by them, thus *losing* water in one region and *regaining* it in two others. This want of equilibrium is, however, obviated by constant currents in the ocean, from the poles towards the tro-

pics.* In figure 1 of the following plate, (where the outer line denotes a supposed boundary to the atmosphere,) we see the vapors rising from the equatorial regions, and passing towards the poles, where they return to their parent deep, in the form of dew, rain, and snow. Thus restored to the ocean, they flow towards the tropics, and there chime in with the prevailing currents, in their course to the westward. In the central part of the same figure an idea may be formed of the effect of an intervening continent, in opposing its solid form to the fluids through which it is rapidly and constantly passing, with greater velocity than those fluids can possibly follow it. At 1, the equatorial current meets an opposing cape, which divides it into two parts: one flows pretty freely from the north-west, being kept, however, in its place by the north polar currents pressing towards it. It meets another projection at 7, still farther to the north; and after passing it, the stream is *forced* into its more natural position near the equator, and proceeds in its westerly course, after forming a great counter-current or eddy in the sheltered gulf at 6, where navigators would fall in, for days together, with what would appear, if viewed on a small scale, totally opposed to the theory now under explanation. Returning to the Cape at 1, we find the other half of the northern equatorial stream proceeding to the south-west, where it fills the deep gulf, or sea, at 3, and keeps up the waters there at a high level, on a principle which will immediately be explained. It cannot, however, make its escape in a body or current from this gulf, but, being confined by the southern division of the equatorial stream, a variety of eddies on a considerable scale are produced at 2. It is unnecessary to explain the figure further, by proceeding to the southern hemisphere, where similar effects are produced by nearly similar causes at the points 4 and 5; we may therefore proceed to explain upon what principle the level of the sea in the gulf at 3 is kept up at a higher level than the same surface in the bay at 6, an effect which is known to exist in several remarkable instances on the globe, and which, according to the theory, ought to exist in every situation similarly situated.

By fair analogy, we find that, in this, as in other parts of nature, what takes place on a small scale may also be looked for on a larger. Proceeding then upon this principle, and considering minutely the rapid and rocky course of a brook or river, we find that, so long as the water flows over a smooth and equal bed, the depth and surface of the stream are in all places alike, as in figure 2 of the plate. But when, on the other hand, a fixed and solid opposition is encountered, in the form of a projecting rock, derangement in the level instantly takes place, to a degree proportioned to the bulk of the opposing object. An accumulation or rise in the water takes place on the upper side, until the current finds a vent at one or both extremities, and without this vent, the accumulation increases until the water flows over the top, when the difference of level above and below the object is at once apparent (see fig. 3). But supposing the impediment to be small, in proportion to the size of the stream, still, in every case, a change of level must be the consequence; and the recovery of tranquillity is only completed at some distance below the object, where it, at length, falls again into the general inclination. Beneath or behind this opposing rock, then, there is a sheltered nook, upon which the stream can only act in the form of an eddy; and in such nooks buoyant objects are often kept, as it were, imprisoned by the force of the stream on each side, and floating round in one continual circle. These eddies of the smaller rivers are equally well known to fish and fishers, as both are there sure to find their wished-for prey. Now, all these effects are to be expected on the great scale of the ocean current, as well as in the smaller instance of an inland brook. The *streamward* side of these mighty rivers will always be found on a higher level than the *eddy side*; and consequently the inland gulf at 3, (fig. 1,) ought to be considerably higher than the waters in the bay at 6, which remains sheltered from the powerful action of the current. Thus the level of the Red Sea, which is filled and kept up by the action of a powerful stream across the Indian Ocean, was found, by the French engineers, to be so considerably higher than that of the Mediterranean, that much difficulty and expense would have been incurred in the canal which was once projected across the isthmus of Suez, in order to facilitate the communication with India by this route. A second instance of this effect no doubt exists in the gulf of Mexico, compared with the level of the north Pacific on the western coast of Mexico; but the actual difference of level has not yet been ascertained. A remarkable instance, however, of this difference of level, obviously arising also from the above cause, has been kindly communicated to us by Sir H. Douglas, who was then governor of New Brunswick, where it was found that, in a proposed canal intended to have been cut from the top of the Bay of Fundy to Bay Verte, in the Gulf of St. Lawrence, (a distance by land of only fourteen miles,) the difference of level of the two seas was no less than sixty-three feet,* the rise of the tide in Bay Verte being

Fig. 1.

Theory of the General System of the Currents both of aqueous and aerial Fluids.

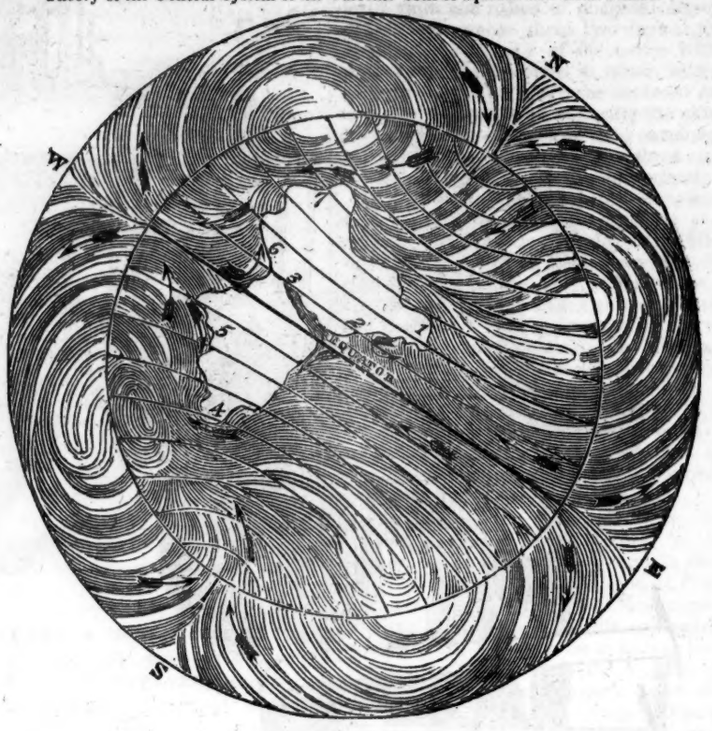
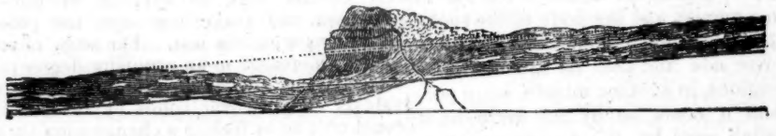


Fig. 2.

Unopposed Current.

Fig. 3.

The Consequence of Opposition.



* It is probable, perhaps even certain, that *heat* has also a very considerable influence in keeping up the movement and circulation of the waters, but it is not likely that currents of great extent are set in motion by this cause. Water, like air, expands by heat, and contracts by a certain degree of cold, not, however, so low as the freezing point, for at that temperature ice is formed, and the formation of ice is always accompanied by violent expansion, so great, indeed, as to burst the strongest vessels, and to cause explosions like cannon, in the lofty glaciers of Alpine regions.

As warm water rises above the colder, (except in the extreme case of ice, which always floats,) and as current- and counter-currents are always acting *horizontally*, and then intermixing the fluids from the poles and from the tropics, it is obvious that an interchange must also be constantly going on *vertically*, in the waters of the ocean, and thus completing the circulation of which the great superficial currents, already described, are the leading cause.

* Surveyed by Mr. Francis Hall, and reported upon by Mr. Telford.

only seven feet, while that in Cumberland Bay, of the Bay of Fundy, exposed to the full force of the Gulf stream, was seventy feet. The Bay of Fundy is kept at this high level in consequence of the projecting peninsula of Nova Scotia impeding the current which rushes along that coast towards the north, and which, from the bend of the coast towards the north-east, is carried in that direction, leaving the gulf of St. Lawrence as a sheltered eddy or nook.

We may now proceed to a cursory view of the whole existing system of the currents, as far as the observations of navigators have made us acquainted with them; but in the rapid sketch which is alone consistent with the limits of a paper of this description, it would be impossible, and even injudicious, to be led from the general outline into any notice of the innumerable minor currents of which seamen have frequently made mention, and which may often be looked upon as eddies and counter-currents, produced by the main body of the stream,† and being occasioned by a variety of changing circumstances, may not again be found in the same exact position.

As it is necessary in this circuitous course to start from some particular point, which may be considered as it were a commencement of the circle, we may adopt as the most proper the western line of the continent of America, whereby the circle is more nearly broken, from pole to pole, than by any other of the dry lands of the earth. Setting out then from this point, and viewing more especially the equatorial line of currents, we enter the immense expanse of the North and South Pacific, where every account that has touched upon the currents tends to establish the fact of their westerly course; and as the force of these currents must there be more steady and equal than on any other part of the globe, from their being unopposed by any thing more important than clusters of small islands, we should not expect them to assume that dangerous and impetuous power by which they are frequently distinguished in the Chinese sea, and in the Atlantic. Mr. Mariner, and other navigators, have given us some interesting proofs of the existence of westerly currents, in the adventures of parties of natives, passing from one island to another, being carried to a distance of many hundred miles, and being found on islands from whence they were utterly hopeless of ever being able to regain their native shores. Of this portion of the globe, however, it must be admitted that we as yet know but little with regard to the currents. But if we find in the Indian Ocean, and in the Atlantic, a series of well established facts in support of the system now under consideration, we have a full right to extend it, by analogy, to the less visited parts of the globe, especially when corroborated by the few but striking facts just alluded to. Proceeding then in a westerly course, and having reached the western bounds of the Pacific, with the Chinese islands and shores on the one hand, and the continent of New-Holland on the other, we hear of a succession of powerful currents from the eastward, forcing their devious courses through the crowded archipelago, and pointing towards the east coasts of Africa. Here the currents of both sides of the equator, being confined in a much smaller space than in the Pacific, and being forced by the form of the land out of that position which is naturally given them by the rotatory motion of the earth, become more violent, and consequently more obvious. In their efforts to retain their position north of the equator, they act with great force against the shores of the seas of Bengal and of Arabia, occasioning in the former the well known and formidable surf of Madras. Finding no vent in a northerly direction, the united stream is forced to the southward, along the east coast of Africa, and if left at liberty, it would follow the southerly impetus thus given to it, and flow into the southern ocean. In this, however, it is opposed by the south polar currents, and it therefore no sooner arrives at the Cape of Good Hope than it doubles that point, in the well-known Lagullas stream, and, running in a north-westerly direction, hastens to regain its natural position on each side of the equator. The force of this current off the Cape is so great, that nothing but a prevalence of westerly winds at some seasons could enable outward-bound ships to make head against it; and even with these favorable winds, ships are constantly found driven to the westward in the very face of the wind.

In following out the course of the equatorial stream across the Atlantic, we find it in part crossing the equator obliquely, and this great moving mass of waters, striking upon the eastern point of Brazil, is divided into two streams, one driven to the southward by the form of the coast of South America, until it is forced round Cape Horn, as it had before doubled the Cape of Good Hope, and joins in with the waters of the Pacific; the other, taking a north-westerly course towards the Caribbean sea and the Gulf of Mexico, passing with considerable force amongst the islands of the West Indies. Having reached the Gulf of Mexico, which opens its extended arms, as it were, to receive it, the current is there brought to a full stop, being precluded from advancing to the westward, or northward, by the form of the lands, and the waters being in consequence *accumulated* into a higher level than perhaps in any other known position of the whole globe. This elevation has often been *supposed*, and has even been shown to be demonstrably certain, without, however, any good reason having even been assigned for the phenomenon. We here, therefore, find a natural, and even necessary cause, upon the same principle as has been already explained by fig. 3 of the plate. The high level of the sea in the Gulf of Mexico cannot, however, pass a certain boundary, and the swell of waters at length finds relief by the only possible, though tortuous course, that is left open for its issue. The stream then rushes with a violence proportioned to its late confinement, round the south point of East Florida, and here, taking the name of the Gulf Stream, it proceeds to the northward, along the coasts of the United States to Newfoundland, where it encounters the Great Bank, and becomes again divided, one portion continuing towards the north and east by Iceland and the coast of Greenland, until again stopped by the north polar currents; and the other, bending to the east and south, is terminated in an immense vortex in the centre of the north Atlantic, where it accumulates on the surface prodigious quantities of the *fucus natans*, or Gulf-weed, which is known to flourish in the warm waters of the Gulf, and to be carried by the stream into the Atlantic, and there covers the surface for hundreds of miles, together with floating timber and other bodies, washed out by the rivers of America. In this great eddy, then, the famous Gulf Stream may be said to terminate; but not so the other portion of the current which had passed on towards the north: when met by the north polar currents from the arctic seas, it is headed back towards the south, along the coast of Norway, and into the North Sea. We here feel its effects upon our own coasts, especially of the north of Scotland, and of Ireland, where floating substances from southern latitudes are frequently found. A minor branch passes through our channel, and rejoins the greater stream across the Bay of Biscay; and the whole at length becomes blended once more in the equatorial current off Cape Verde and the coast of Africa.

In an interesting work which has recently appeared—the Narrative of Capt. Owen's Voyages for the Survey of the Coasts of Africa—we have a distinct proof of the great obscurity which still overshadows the subject of the currents. In the observations on the results which have been gained by this long, interesting, and most fatal expedition, we find the greater part of the subject connected with the currents summed up in the following passages at the end of the work.

"As in the foregoing narrative but few observations have been introduced respecting the currents, and as it is a subject of much speculation and interest, at least to those connected with navigation, the following remarks from Capt. Owen's Journal may be considered worthy of publicity.

"It is a well known fact, as regards the African seas, *that there is a perennial current which sets into the Atlantic Ocean*, round the entire southern extreme of that continent; this current varies in its velocity in different situations, and at different periods, from five miles to one mile an hour. Some writers have supposed that, with reference to the Great Ocean, the Atlantic may be considered as a kind of mediterranean sea, the evaporation from which, together with winter frosts to the northward, must be supplied from the Southern Ocean, in like manner as the Mediterranean is fed from the Atlantic; *and this hypothesis is borne out* by the strong perennial currents about the shores of Cape Horn, and through the islands in its vicinity. But it is remarkable that these currents never appear to extend more than *twenty leagues beyond the common deep-sea soundings*, while their velocity is much decreased when near the shore; from which it may be understood that the depth is much diminished, and the stream broken by projections of bank and sand.

"Ships are frequently carried to the westward, quite round the Cape of Good Hope, *even against the strongest north-west gales*, by this current."

Capt. Owen then proceeds to state the dangerous nature of the short though *high* waves produced by the currents and wind being in opposition, and the most effectual course by which the danger may be avoided. It is quite clear that every thing here

† Major Rennell's work on the currents is accompanied by a laborious and valuable volume of charts, which, if any objection could be made to them, might be considered so minute as to produce confusion. It appears that the courses of the minor eddies have been laid down wherever any naval authority could be produced for their existence, although it is more than probable that a large proportion of them may not again be found in the same position by future navigators.

stated is strictly in accordance with the theory here advanced. He bears witness to the *constancy* of the current from east to west; and in other parts of his work, when treating of the east coasts of Africa, and those of Madagascar, he mentions the rapid nature of the currents *passing down from the northward towards the Cape*, by which, in one instance, the Leven, in making the point of Mombas, was driven so far to the southward, that it took her *six days* to regain what she had lost by the failure of the wind for about *three hours*.—[Vol. II. p. 150.]

It is known also that, off the Cape, ships have been driven to the westward, at the rate of sixty or seventy miles per day, *even against* a strong westerly wind.

The only part of Capt. Owen's statement which in any degree stands opposed to what is now advanced, is the allusion to the constant currents at Cape Horn. These are not *stated* to run to the eastward, or *into*, instead of *out of* the Atlantic, but that fact is implied by the theory of *evaporation* from the Atlantic, which is counter-balanced by *entering* currents at both capes. This is opposed by the general reports of the navigation of Cape Horn; it is opposed also, most distinctly, by the much better attested facts of currents *out of* the South Atlantic towards the north. For if evaporation took place on so great a scale as to produce *entering* currents at the two great capes, we must admit that an *entering* current should also flow from the colder latitudes of the north, which is not the case. As to the fact of the current at the Cape being little felt *close in shore*, and gradually diminishing in force as it extends to the open ocean, a hundred miles or more from land, it is in every way consistent with the whole theory of inland rivers. In the case of a projecting bank or rock in a river, the actual point of contact is exposed to great violence, but every other point of the stream exhibits the phenomena described by Capt. Owen off the Cape. Under the most projecting rock or point, comparatively smooth water is generally found close to the side; while the main body of the stream drives past with a distinct and rippling outline, diminishing in force, however, as it spreads out into the expanding pool below.*

We have thus passed in review the great and leading course of this wonderful and most admirable system by which the waters of the ocean are kept in that continued movement so necessary to their purity, and by which, also, it is highly probable that many important ends are effected, in regard to the amelioration of the climates of various parts of the earth. The land and sea breezes of the hotter climates are now well known, and also their causes. We may naturally suppose this wholesome interchange to be powerfully affected by streams of current from the cooler latitudes; and we also may be assured that the heated waters of the Gulf Stream must carry along with them into the Frozen Ocean a degree of warmth which cannot but materially affect the rigidity of those latitudes. Even in our own country, we are well aware, from continued experience, of the mild effects of a westerly wind. We have no particular warmth to look for from the *lands* to the westward of us; on the contrary, the winters of Labrador and of Canada are well known to be unusually severe. But when we find that a vast reservoir of heated water, and consequently of *warm vapors*, exists in the Atlantic, we can no longer find a difficulty in naturally accounting for the mild and humid effects of our westerly winds, which, even in winter, produce on Ireland and the west coast of Britain the verdant growth of a milder season.

It is scarcely necessary, in conclusion, again to revert to the theory of the winds being the prime movers of the currents; for besides the arguments already adduced, by which we trust it has been shown that ocean currents could not but exist, even if there were no winds whatever, we have only to examine the numerous instances mentioned even by Major Rennell, of ships being drifted far to *windward*, in the very teeth, not of transient breezes alone, but of settled and heavy gales. "One ship," says he, "was carried 10° of longitude (*equal to* 570 *miles*) to the westward, between Cape Verde and the Cape of Good Hope, and yet had been subjected to the south-east trade wind. Another was driven 220 miles, between the Canaries and the coast of Brazil. Another in the equatorial current, in June and July, was set 297 miles to the westward, *in five following days*, between 3° north and 4½° south, and yet had entered the south-east trade wind." Such, and numerous other instances, well known to all seamen, are sufficient to show that the currents must be set in motion by some much more powerful and less *superficial* cause than the mere *friction* of the winds, however fixed or severe. That the winds agitate the *surface* of the waters no one will attempt to question; but that this agitation can extend to the vast depths at which the law of fluids above explained must operate, we have not the slightest reason to suppose. Major Rennell brings forward, in proof of his theory, the well known fact, that the surface of a canal, or of a lake, is always higher at the *leeward* than at the *windward* side. This fact is at once admitted, but it is one of very small effect, and merely *superficial*, being occasioned by *waves*, and instantly subsiding with these waves. But in order to prove the point, it must be shown, that in a straight canal of several miles in length, with a strong breeze right on end, the force of the winds, near the middle of the distance, (where they must have acquired their full force,) can affect an object of no great weight *at the bottom of the canal, and at a depth of four or five feet.* If this effect takes place in canals, or in large inland lakes, such as those of North America, and also at considerable depths, the theory might be supposed to derive some support from it. But this is not the case; and in inland lakes, of whatever extent, although the surface may be raised on the leeward side, in violent winds, objects deposited at a few feet of depth lie perfectly secure and unmoved.

The winds would not, therefore, effect the end for which the great circulation of the waters of the ocean is obviously intended; and any theory of the currents, which is mainly founded on so false a ground, however ably it may be treated, cannot but mislead the mind, and in many instances prove injurious, not only in a scientific, but also in a practical point of view.

* Major Rennell gives many interesting instances of bottles and other bodies carried by the currents. In one case a bottle was thrown overboard from the Osprey, of Glasgow, on the 17th of January, 1822, in 6° 13′ south latitude, and 15° 35′ west longitude, and it was found on the 27th of July of the same year, in Mayard Bay, in the island of Trinidad.

In another case, still more remarkable, a bottle was thrown from the American ship Lady Montague, on the 15th of October, 1820, two leagues north-east of the island of Ascension, and was picked up *on the west coast of Guernsey*, the 6th of August, 1821, and notice of it sent to the Admiralty. It is certain that this bottle must have passed, in ten months, over the whole course of the Gulf Stream, and from thence be carried (probably by the coasts of Iceland) into the North sea, and through the English Channel. We cannot, however, decide from this, or almost any instance of floating bodies, as to the *rapidity* of the current, for we cannot tell how long it may have been detained at various points, nor how long it may have remained on the spot where it was eventually discovered.

NEW-YORK AMERICAN.

APRIL 12—18, 1834.

LITERARY NOTICES.

For the first time since we commenced our *Saturday Reviews*, we ask indulgence at the hands of our readers for being unprepared with one. But in very truth we have been too much engaged, heart, mind, and body, during the past week, in what we deem the sacred cause of Liberty and the Constitution, to have had either leisure or inclination for any mere literary labor. The traveller in the far West, too, whose letters add a relish usually to the Saturday paper, fails us—or rather, probably, Mr. Post Master Barry's mail carriers fail us—this week; and we throw ourselves, therefore, on the indulgence of our readers.

SUMMARY.

The Norfolk Herald of onday, is in mourning for the death of Judge *Robert B. Taylor*, one of the most eminent citizens of Virginia.

It is our painful duty (says the National Intelligencer of yesterday,) to announce the decease of the Honorable Littleton P. Dennis, a highly respected and most estimable Representative in Congress, from the State of Maryland. He expired yesterday afternoon, at his lodgings in this city, after an illness of six or seven days.

Charles R. Leslie sailed Wednesday in the Phila delphia for London. The Professorship of Drawing at *West Point* did not answer his expectations, and duty to his family compelled him to return to Europe.

Last evening, by invitation, Mr. Leslie met a number of brother artists and literary gentlemen, at an entertainment at the rooms of the Academy of Design, who testified to him their admiration of his genius, and their regret that he was not longer to remain among us.

With the exception of Col. Trumbull and Mr. Dunlap, one prevented by illness, the other by the somewhat increasing infirmities of age, all the painters, engravers, and sculptors of the city and vicinity were present, together with *Messrs. Washington Irving, G. C. Verplanck, James Hillhouse, F. G. Hallock*, and other literary gentlemen.

It was a parting tribute—well deserved on the one hand and rendered with taste and feeling on the other.

The following letter from Commodore Ridgely, sets forth the liberal contributions made at the Navy Yard, Brooklyn, in aid of the Poles—the money is in the hands of Mr. George W. Lee, Treasurer of the Naval Lyceum, to be paid over to such Committee as may be raised to assist these exiles.

Naval Lyceum, United States Navy Yard.
New York, April 15, 4834.

I am requested by several of the members of the United States Naval Lyceum, employed and residing at this station, to transmit the within amount of money, $146.50, to you as a Committee, to be used as you, in your better judgment may think proper, for the benefit of the unfortunate but gallant Poles, who have been lately brought to this country in the frigates of Austria.

I take great pleasure in saying that part of the contribution was made up by the Joiners employed in the yard, and the Seamen and Mariners afloat, who voluntarily gave them twenty-five cents each, and

who would have contributed more, had I permitted them. I am Gentlemen, very respectfully,

Your obedient Servant,

CHAS. G. RIDGELY.

It gives us great pleasure to learn that the CONVENTION *for the settlement of our claims on* SPAIN, which the President announced at the opening of the present session as in progress, was *signed at Madrid on the 17th of February*, and may be shortly expected at Washington. We hasten to communicate this information, which to the claimants, is so important, and to the country at large so gratifying, as it funishes another proof of the succes of the just and enlightened policy pursued by our venerable Chief Magistrate.—[Globe.]

IMPORTANT RESOLUTIONS.—The following resolutions have been submitted for the consideration of the House of Representatives of the United States:

By Mr. VANCE, *of Ohio.*

"*Be it further enacted*, That from and after the passage of this Act, instead of the compensation now allowed by law, there shall be paid to the within named officers the following sums per annum:

"To each of the Secretaries of State, Treasury, War, and Navy, four thousand dollars. To the Postmaster General, three thousand five hundred dollars. To each Assistant Postmaster General, eighteen hundred dollars. To each of the Comptrollers of the Treasury, two thousand dollars. To each of the Auditors of the Treasury, two thousand dollars. To the Solicitor of the Treasury, two thousand dollars. To the Register of the Treasury, two thousand dollars. To the Treasurer, two thousand dollars. To the Commissioner of Indian Affairs, two thousand dollars. To the Commissioner of the General Land Office, two thousand dollars.

"And that there be deducted from the compensation now allowed by law to the Clerks in the Departments of State, Treasury, War, and Navy, including those in the General Land Office, at the rate of thirty-three and one third per centum per annum.

"That from all officers of the customs, by whatever name designated, or in whatever manner employed, there shall be deducted from the compensation now allowed to them by law, at the rate of thirty-three and one-third per centum per annum.

"That from all officers connected with the system of the public lands, either as Surveyors General, Registers, Receivers, or Clerks, there shall be deducted from the compensation now allowed to them by law, at the rate of thirty-three and one-third per centum per annum.

That from all the Clerks in the General Post Office, Deputy Postmasters, their Assistants and Clerks, there shall be deducted from the compensation now allowed to them by law, at the rate of thirty-three and one-third per centum per annum.

"That from all persons connected with the Indian Department as Superintendents, Agents, Sub-Agents, Interpreters, Agents for removals, Commissioners, or in whatever other manner employed, there shall be deducted from the compensation now allowed them by law or regulation, at the rate of thirty-three and one-third per centum per annum.

"That to the members of the Senate and House of Representatives, instead of the compensation now allowed by law, they shall receive six dollars per day and six dollars for every twenty miles travel to and from the Seat of Government. And that from and after the expiration of the present Presidential term, the salary of the President of the United States shall be fifteen thousand dollars per annum."

The BANK OF WASHINGTON, at Washington, has stopped payment.

The notice of the stoppage of payment by the Bank of Washington, another of the inevitable consequences of "the experiment" which is carrying disaster and devastation over the whole face of the country, was as unexpected to us as it will be to our readers. In the perfect integrity of the administration of that Institution, entire confidence is reposed; and the step which it has taken is doubtless the result of irresistible necessity.—[National Intel.]

ANOTHER AND ANOTHER.—The Patriotic bank of Washington—which it was supposed might, by the aid of the Pet Bank there, escape the fate which three of the banks of the District have undergone—has found that aid not forthcoming, and has accordingly been obliged to suspend specie payment. A public notice from the President and Directors of the Bank avers its solvency notwithstanding.

We regret to hear of the alarming illness of HORATIO GATES Esq., of Montreal, a merchant of high character and great personal worth, and well known by his extensive business relations in the States, as well as in the Canadas. His death (which was hourly expected at the date of our information) will be a severe deprivation not only to his amiable family, but to the city, to the prosperity of which, his enterprize has greatly contributed, and particularly to the numerous visitors from the United States, to whom his courtesies and civilities have been so liberally extended.—[Albany Argus.]

COURT FOR THE CORRECTION OF ERRORS—Tuesday, April 15.

The Chancellor moved that the extra term of the Court be held on the 23d day of August next, at the Capitol in the city of Albany. On motion of Mr. Maison, the question as to the time and place was divided; and after some conversation between several members of the Court, the time, (23d August) was agreed to. Mr. Kemble then moved a resolution that the term be held at the City Hall, in the city of New York. Mr. Westcott moved to lay the question on the table—Lost. The motion to hold the term at the Capitol in the city of Albany was lost—ayes 13, noes 17, as follows:

Ayes—The President, Chancellor, Justice Savage, and Messrs. Conklin, Edmonds, Edwards, Fisk, Hasbrock, Hubbard, Macdonald, Stower, Tracy, Van Schaick—13.

Noes—Messrs. Armstrong, Bishop, Cary, Foster, Griffin, Halsey, Kemble, Lansing, Livingston, McDowell, Mack, Maison, Quackenboss, Seger, Seward, Sudam, Westcott—17.

The motion that it be held at the City Hall in the city of New York was then agreed to. Adjourned to Friday, the 25th inst.

From the Boston Mercantile Journal.]

ACCIDENT ON THE RAILROAD.—We learn that a serious accident occurred yesterday afternoon, on the Boston and Worcester Railroad. As the locomotive was returning from Newtown, with a train of passenger cars, when near the Four Corners, H. H. Fuller, Esq. and lady, of this city, attempted to cross the track with a horse and chaise, in advance of the locomotive. Mr. Fuller, it appears, was not aware of the proximity of the Engine, and unfortunately crossed the track at the moment the Engine approached, without perceiving it. The consequence may be anticipated. The locomotive struck the wheel of the chaise, shattered and overturned it. Mr. and Mrs. Fuller are considerably injured, but we are happy to learn not dangerously.

RICHMOND, APRIL 2.—The driver of the Northern mail cart yesterday morning before day, drove over a steep bank, a few miles this side of Hanover Court House, and falling under the horses' feet, it is believed, was trampled to death by them. He was apparently dead when left by the stage. In consequence of this melancholy occurrence, the Northern mail was delayed two or three hours to its arrival in this city yesterday morning.—[Whig.]

[*From the Daily Advertiser.*]

LATEST FROM SPAIN—VIA BORDEAUX.—By the Brig Rome, Capt. Davi, arrived last night, from Bordeaux, having sailed on the 16th March—the Editors of the New York Daily Advertiser have received files of papers to the 11th, containing Madrid dates to the 6th March, and Bayonne to the 9th.

The Capital of Spain continued perfectly tranquil. No change in the ministry had taken place, nor was any talked of. The Northern Provances were in a very rebellious state. The Carlist party was far from being subdued.—We have only time to make the following translations:

A correspondent writes from Bayonne the 8th March, by a courier extraordinary, which left Madrid the 5th March, we learn that on its departure the capital was perfectly tranquil. The Queen had left for Arangnes. No change in the ministry had taken place, nor was the subject even mentioned.—A movement had taken place, by a party of the Carlists who had been put down, and some 8 or 10 had been killed, and several arrested.

Another courier which left on the 6th, represented that Madrid was perfectly tranquil.

The success of the Queen's troops, at Onati, in capturing 120 persons, 590 guns, and a squadron of mules with munitions of war, belonging to the Carlist party, is confirmed.

Col. Leremzo had captured a large body of insurgents at Aspetia.

It was reported that the Courier from Paris had been assassinated by the insurgents, near Bedous.

Tolosa and Villafranco are constantly occupied by the troops of Il Pastor.

Murder of Captain Skirling.—Intelligence has been received of the murder of Captain Skirling, who was engaged under the direction of the Board of Hydrography, in surveying the west coast of Africa. On the 23d of December, 1833, he left his ship early to commence the survey of Cape Roxo, in a boat, accompanied by four men and a boy. On the boat landing, the natives, apparently attracted by the glitter of their instruments, attacked them, shot the cockswain, and then speared the captain. They were so intent upon plunder, that they allowed the rest of the crew to escape. They hid themselves in a bush, and after some time made their way down to the coast, and fortunately signaled the boat of the tender to the Etna. Captain Skirling served under Captain Hewett, in the Fury, in the survey of the North Seas. He then sailed in Captain P. P. King's expedition round Cape Horn, and succeeded Captain Stokes in the command of the Beagle. He was a most charitable and good man, and had left a wife and two children to deplore his early death.

Ignorance v. *Knowledge.*—Knowledge has the wantonness of a child and the cruelty of an ogre.—He builds up systems in one age, only to overturn them in another; he begets theories in one century, and not only exposes them to perish, but is himself the unnatural instrument of their destruction in the next. He resembles Homer's infant on the seashore, raising castles of sand with pains and perseverance, then with hands and feet demolishing its labors; or he may be likened still better to Titan, devouring, as fast as they see the light, the offspring of his own loins. Now turn we to Ignorance, and what do we behold? Not content with evincing the tenderness of a parent, by defending, like a lion, his own notions and opinions whenever they are attacked, he rushes forward with disinterested courage to the succor of systems and theories with the procreation of which he had nothing in the world to do, the moment he sees them deserted by their natural protectors, and in danger of being annihilated by the ruffian Improvement, or that shocking desperado, Reform. This promptitude to espouse the weak is extremely amiable in Ignorance. Let him but see a principle in any science, astronomy, geology, anatomy, metaphysics, or politics, no matter how philosophical its pedigree, in danger of being roughly handled by what is called the march of intelligence, or the extension of experience; in other words, hustled by a knot of ill-looking facts, like a foot-passenger in Oxford street by a gang of pickpockets, Ignorance at once cries, 'To the rescue!"—makes common cause with the doctrine in distress—knocks down one fact with a flat contradiction—floors another with a shout—puts a third "hors de combat" with a horse-laugh, and by this chivalrous conduct not unfrequently extricates his friend, and gives some useful error or venerable prejudice a new lease of its existence. But in the catalogue of the vices of Knowledge, although there be many blacker, there is none so contemptible as his curiosity.—Ignorance, it must be allowed by his best friends, is in some few particulars rather more inquisitive than becomes his dignity; he is sometimes too anxious to discover what his next door neighbor is to have for dinner; or how many thousand pounds the old lady on the other side of the street has got in the Three per Cents; or what business the gentleman, who lives six houses higher up, has with the fat man in a green coat and pink cravat, who knocks at his door every day, except Wednesdays, at five minutes past two precisely; but what of this?—it is only in *downright trifles* that any body can justly tax Ignorance with curiosity—when was he ever known to meddle with the *great* secrets of the world?—When, for instance, was he ever caught, like the elder Pliny, *peeping* into the crater of a volcano? Never; he leaves such low tricks to those Paul Prys, yeleped philosophers. He would have remained in the dark for ever as to the laws of electricity, before he would have stooped to the mean artifice of Dr. Franklin, who, on pretence of flying a kite, insinuated himself into the confidence of a thunder-cloud, made himself acquainted with all its private affairs, and then (to crown his baseness) published them to the whole world. Nature never leaves her wardrobe, or a drawer of one of her scrutoires unlocked, but these dirty fellows, your men of science, take advantage of the overnight to tumble her dresses, read her family papers, and often purloin her trinkets for their cabinets and museums. What are mineralogists but a gang of thieves, who have discovered the secret springs of the chest, in which Nature keeps her treasures? What are phrenologists but pick-locks, who actually boast of having in their possession a *key* to the whole mystery of the human mind? The mathematician

you may swear is about nothing handsome—he is generally to be found in angles and corners. The astronomer waylays nature by night; the botanist, in wild and sequestered places—

" In wood or grove, by mossy fountain side,
In valley, or green meadow;"

wherever, in fact, she is likeliest to be found asleep, or undressed. Who, then, can doubt the purity of the intentions with which he pursues his cryptogamias and syngenesias? No question, Apollo's pursuit of Daphne was nothing in the world but a botanical excursion:—the divinity only wanted to ascertain the nymph's class and order. Then what have the conchologists and entomologists to say for themselves? The elders in the apocryphal legend, Heaven knows, were filthy old fellows enough; but their obscenity was chastity, compared to the conduct of these men of periwinkles and butterflies; they did not put on their spectacles—at least it is not so written—to contemplate the bathing beauty; they were content to stare at Susannah's charms with the naked eye. Not so the entomologists; not even spectacles are enough for them; they must actually have microscopes, or they think they see nothing.—[Metropolitan Magazine.]

The Poetical Works of the Rev. George Crabbe; with his Letters and Journals, and his Life, by his Son. London: John Murray.

We select the following instance of delicate, liberal, and sincere patronage of destitute genius, unequalled, perhaps, in any age, but, we fear, vainly to be looked for in this. But the great Edmund Burke possessed a fine mind, a feeling heart, and a genius which sympathised with genius wherever found.—The Poet of "The Village" and "Annals of the Parish," sought for fame and fortune in London—the *El dorado* of youthful hope. His hopes sustained repeated and cruel disappointments; poverty progressed upon him, until he was driven to the verge of extreme destitution, though it weakened not his piety nor subdued his dependence upon a protecting Providence: that Providence asserted itself and rewarded him through a suitable agent. When the prospects which he attached to the judgment, liberality, or self-interest of the book-selling tribe, were extinguished, and that he knew not where to find the next day's bread, for manna dropt from heaven in his days no more than in ours, he bethought him as his last resource to write to Edmund Burke, and enclosed him a specimen of his poetry. Hope deferred was not suffered to sicken our author's heart—he received an immediate answer from the great champion of rational liberty and Gospel truth, inviting him to an interview. Mr. Crabbe's son shall tell the rest:

"Mr. Burke was, at this period, (1781) engaged in the hottest turmoils of Parliamentary opposition, and his own pecuniary circumstances were by no means affluent; yet he gave instant attention to this letter, and the verses which it enclosed. He immediately appointed an hour for my father to call upon him at his house in London; and the short interview that ensued entirely, and for ever, changed the nature of his worldly fortunes. He was, in the common phrase, 'a made man,' from that hour. He went into Mr. Burke's room, a poor young adventurer, spurned by the opulent, and rejected by the publishers, his last shilling gone, and all but his last hope with it; he came out virtually secure of almost all the good fortune that, by successive steps, afterwards fell to his lot—his genius acknowledged by one whose verdict could not be questioned—his character and manners appreciated and approved by a noble and capacious heart, whose benevolence knew no limits but its power—that of a giant in intellect, who was, in feeling, an unsophisticated child—a bright example of the close affinity between superlative talents and the warmth of the generous affections."

If our space permitted, we should like to pursue further this period of the poet's life and fortunes—suffice it to say that Mr. Burke took him into his house, placed him at his table, gave him the advantages of his books, and conferred all these favors with a delicacy that never suffered his guest to experience a feeling more painful than gratitude. Although Crabbe had not been regularly educated, Mr. Burke got him ordained by Dr. Young, then Bishop of Norwich, and, by introducing him to other patrons, did not suffer the course of his fortunes to stop until the poor poetical adventurer became the incumbent of two livings, and was enabled to pass the rest of his life in happiness and "learned ease."

Both Houses of Congress adjourned on Tuesday, in token of respect to the memory of the deceased member from Maryland, Mr. *Dennis*, whose funeral was to take place next day.

Appointments made by the Governor, with the advice and consent of the Senate, April 11.

New York.—John T. Morris, culler of staves and heading.

April 16.—*New York.*—Michael Ulshoeffer, Associate Judge of the Court of Common Pleas.

YOUNG MEN PROSCRIBED!—The House of Assembly this day REJECTED the bill incorporating the YOUNG MEN'S ASSOCIATION FOR MUTUAL IMPROVEMENT. This vandal blow will astound our citizens! There is not on record another such act of Legislative proscription and intolerance.

This Association is conferring immense benefits upon the youth of our city. It has grown, under the fostering care of our citizens, into vigor and maturity. It has ample means to perpetuate its usefulness, and only wanted, what has been granted to all other Literary Associations, an act of Incorporation. But this small boon is denied! The Legislature refuses its protection to some fifteen hundred of our Young Men who are associated for Mutual Instruction!

The above paragraph is from the Albany Journal.

SPAIN.—It will be recollected that in the previous amnesty of the Spanish Government, the language was deemed so unexceptionable that many of the exiled members of the Cortes refused to avail themselves of it. We now publish the last, made under the new Minister, which is conclusive, without any qualification or reservation, and such as will be deemed unexceptionable.

OFFICIAL—*Spanish Amnesty—Decree.*

"Considering the reasons which you have laid before me, and complying with the opinion of my Council of Ministers, I have thought proper, in the name of my beloved daughter Donna Isabel Segunda, to extend the Royal Decree of Amnesty to all the ex-Deputies of the Cortes, who may be out of the kingdom in consequence of opinions expressed by them as such Deputies, granting them permission to return freely to the bosom of their country.

"Take notice hereof, and do all that may be necessary for its fulfilment."

Signed in rubric, and addressed to Don Francisco Martinez de la Rosa

Madrid, February 7, 1834.

DEATH OF MR. GATES.—The Montreal Herald, of Saturday last, thus announces this event.

We stop the press to announce an event that occurred last night, and which will be received by the community in general with the deepest sorrow—the death of the Hon. HORATIO GATES, than whom a more honest, upright, just and independant man, never distinguished the annals of mercantile or political history.

Lightning.—The severity of the lightning which accompanied the heavy fall of rain on Wednesday evening was very great. The main-topmast of the U. S. ship John Adams, lying at the wharf at the Navy Yard, at Gosport, was struck; the electric fluid descended the top and main mast to the kelson, splitting and shivering the mast, and then ascending passed out of one of the gangway ports, setting fire to the ship, which was extinguished with but slight damage, owing to the prompt arrival of the engines. The shock of the heavy explosion at 6 o'clock, so much resembling the report of a heavily charged cavalry pistol, was also severely felt in several parts of our towns—a female servant in a family on Town Point, was knocked down and so much stunned that she did not recover for a considerable time. We learn that a small house in a lane near the Steam Mill was struck with the lightning, and a woman and a child, in one of the rooms, for a time rendered insensible.—[Norfolk paper, April 11.]

NEW ORLEANS, SATURDAY, MARCH 29.—*Cotton.*—The increased difficulty in negociating Bills on Europe and the North, has suspended operations for the last few days; the reduction in the rate of Exchange has its corresponding effect on prices; and the market, at this moment, and during several days, has been dull, in consequence. We continue to quote at former rates, because no sale at a reduction will authorize a change; but we repeat the remarks of Brokers, who say that the rates last quoted would be very difficult to obtain; indeed, some go so far as to say that they are nominal. The principal operations, prior to the stagnation, are, viz: 700 bales, at 12 1-8; 80 at 11 5-8; 17 at 11 1 4; 68 at 12 1-2; 88 at 14; 31 at 13 1-2; 500 at 13; 28 at 11 1-4; 261 at 11; 134 at 11; 20 at 12; 11 at 13 1-2; 200 at 13 a 13 1-2; 150 at 14; 21 at 13: 40 at 12 1-2; 100 at 13; 57 at 13; 65 at 14 1-2; and 35 at 11 3-8—all of Louisiana Mississippi; of Alabama and Tennessee, the following, viz.:—168 at 10 3-8; 50 at 13; 90 at 10 1-4; 450 at 10 3-4; 220 at 10 1-2; and 600 bales, rate unknown; *choice* Cotton has brought a fraction over our highest quotations; and, notwithstanding every thing, this description maintains its price.

Sugar continues to be in the usual good demand—we do not alter our quotations; prices are not steady, but vary from 1-2 to 1 cent, according to the want of the seller or the credit of the purchaser.

Molasses.—The season for this article will soon be at a close—the former good demand still continues without any change in price.

Tobacco.—There is an increased demand for this article.

Flour.—There is a falling off in price since our last publication.

Whiskey.—We have again to remark an exceedingly depressed market.

Coffee remains without any change.

Hides—The market may be considered rather dull.

Freights—The rates quoted last week remain without material alteration; we do not, however, as then, say brisk.

CHARLESTON MARKET, APRIL 12.

Home Productions.

COTTON—Sea Island 25 a 35; Stained 10 a 16.
Maine 22 a 25.
Santee 20 a 24.
Short staple, 10 a 13¼.

RICE—Inferior to good 2 a 2½; prime 2¾ a 2¾.

FLOUR—Philadelphia, Baltimore, and Richmond, $5 a 5¼.

CORN—56 a 70; Oats 38 a 43; Peas 66 a 70.

TAR—Wilmington $1½; Georgetown, none.

PITCH—$1½. ROSIN, $1½ a 1¼.

BACON—6¼ a 7½ cents. HAMS 9 a 10½.

LARD—8 a 9 cents. SOAP—Yellow 6 a 7.

OIL—Sperm 90 a 100 cents per gallon.

LEAD—In bars, 6½ a 6½ cts per lb.

REMARKS.

COTTON.—There has been a good demand for all descriptions of this article this week, until yesterday, when in consequence of the inclement state of the weather there was nothing done.—Since the receipt of favorable accounts from Europe, an advance of ¼ cent on Uplands has been demanded and in some instances obtained, one very prime lot was disposed of at 13¾.—The sales down to yesterday morning have been 6151 bales Uplands, as follows:—135, at 13¼, 107, 18½; 517, 13; 963, 13¾; 18, 12½; 443, 12¼; 695, 12¼; 106, 12½; 631, 12; 188, 17½; 343, 11¾; 193, 11½; 633, 11¼; 22, 11½; 509, 11¼; 213, 11: 50, 10½; 493, 10¾; 52, 10¾; 105, 10½; 15, 10⅜; 77, 10¼; 30, 10½; and 13 at 9 cents.

RICE—Remains the same as at the close of the last week, and the demand for any quality except strictly prime, very limited.

FLOUR—Still remains dull.

GRAIN—One cargo of about 3,000 bushels good White Corn, brought 70 cts.

MOLASSES—100 bbls. N. Orleans Molasses brought 31 cents cash.

The China Trade now that the monopoly of the East India Company is done away, is becoming an object of great inquiry and general interest in England. *Sir J. Brabazon Urmston*, late President of the English factory at Canton, has published, or rather privately circulated, a pamphlet on the subject in London, of which we find the following notice in the London Times.

The extract recommends, it will be seen, the selection of a new trading station in preference to Canton.

Sir J. Brabazon Urmston, notwithstanding the idea which he entertains with others of the impracticable character of the Chinese Government, has directed his pamphlet chiefly to show that Canton is a bad port for carrying on the tea trade; that the British trade ought to be removed to a more convenient station; and that a more convenient station would be found in the island of Chusan, of which he gives the following description:—

"The island of Chusan is situated in latitude 30 deg. 26 min. north, and longitude 121 deg. 41 min. east. It is about nine leagues, or 27 miles, in length, from N. E. to S. W., and about five leagues, or 15 miles, in breadth, from N. W. to S. E. Chusan lies off the provinces of Chekiang, to which it appertains, and is about 10 or 12 miles to the northward of Kittow Point, which is the extremity of a long and mountainous promontory of Chekiang province; and the nearest approach of Chusan to the continent of China is at this place. Chusan is the largest and principal of the considerable group generally called the Chusan islands or Archipelago, and is nearly opposite to the river leading to the port and city of Ning-po; and not far from the bay of Hangcheoufoo, which bay terminates in a river called the Tchen-tang-chiang, or otherwise the Cien-tang-keang, leading to the large and important city of Hangcheoufoo, the capital of the province of Chekiang. These cities will be noticed hereafter. The chief town (or city, as it is called) of Chusan, is Ting-hai, which stands about a mile from the harbor; and close to the water's side, at the harbor,

is a village with several houses. It is at this latter place, where we had formerly our factory, as already mentioned. The city of Ting-hai is said to contain 4,000 or 5,000 inhabitants, but I have not been able to ascertain, from any authorities, what the entire population of the island of Chusan is. Ting-hai city is surrounded by a wall, with bastions, and is defended like the generality of Chinese towns—that is, with a few miserable guns."

At this island we had formerly a factory, which was broken up by the jealousy of the Chinese in 1703. It has abundance of excellent water; a harbor completely land locked, protected against all winds, and one of the safest in the world; and being at a very inconsiderable distance from the continent of China, is in the immediate neighborhood of the most flourishing, opulent, and commercial provinces of the empire. It is to this part of the Chinese dominions to which our exports are chiefly sent, though landed at Canton. The opposite coast has several large cities, navigable rivers, and an enterprizing and wealthy population.

There can be no doubt that on a comparison of the geographical situation of Chusan with that of Canton, the preference would be given to the former as a British commercial station; but what assurance have we that our author's project would be adopted at the Court of Pekin? Would it not require several more embassies to the Emperor, more successful than any which we have yet sent, to obtain such a change? Would not the whole Hong at Canton, with the Governor and the tax-gatherers, be in an uproar at the very proposition of deserting their port? Our author does not disguise the difficulties of the undertaking, but expresses his sanguine belief, that if we were resolute to make the change, it might be ultimately accomplished.

Sir Richard Church, K. C. H.—Few men have exemplified the instability of fortune or the mutabillity of human affairs more than this gallant officer.—During the war he embodied and commanded the Greek light infantry corps, with which he materially assisted in the capture of the Ionian Islands, particularly Santa Maura, where he highly distinguished himself. Soon after the general peace he entered the service of his late Majesty the King of Naples and Sicily; here he rose to the highest point of favor with the Sovereign, and honors and rank were liberally bestowed upon him. Nominated to the command of the Calabrias and the Abruzzi, with extraordinary powers, he cleared those provinces of the numerous hordes of brigands and robbers which had long infested them; and his name is yet held in terror by their descendants. In 1820-21 the attempted revolution in Sicily commenced, and Church firmly adhered to the King, amidst many vicissitudes; at length the spirit of intrigue prevailed to so great a degree in the Royal councils, that Church was thrown into prison, from which he refused to emerge unless allowed to exonerate himself before a court martial, upon which he was honorably acquitted. Party ran, however, too high for his stay in Naples, and Church accepted the command, and was appointed Generalissimo of the Greek forces; for some time matters ran on with tolerable success; at last fortune was on the wane, and Church was defeated with great loss in his attempt upon Athens; but continuing to retain the command, he contrived to render important services to the cause in Western Greece, by confining and repelling the incursions of the Turks under Redschid Pacha. Capo d'Istrias, jealous of his popularity, thwarted and baffled all his projects, and Church, at length disgusted, resigned the command, and for several years lived in exile at Ægina, neglected and forgotten. On the accession of King Otho the star of his fortune once more reigned in the ascendant, and Sir Richard Church is now Ambassador Extraordinary from Greece to the Court of St. Petersburgh.—[Naval and Military Gazette.]

From the London New Monthly Magazine for March.

THE PARVENU COUNTESS.

"To hold the mirror up to FASHION."

"How *is* her Ladyship?" asked a little, thin, old woman, bent double with age, and clothed in rusty mourning. 'How *is* her Ladyship?' repeated the poor old creature with a hurried earnestness, and an emphasis so strong, that, like the knock on the Earl of Anketell's hall door which had preceded the question, it seemed impossible that the sound could have been caused by the emaciated and diminutive figure that stood at the portal.

'How *is* her Ladyship;—well I like that,' replied a tall, corpulent servant, whose red swelling cheeks and thick purple lips gave an expression to his mockery somewhat between burly contempt and rage, at being so seriously disturbed for nothing, and by nobody.

'How *is* her Ladyship; well, what impudence the common people have come to!'

'My good fellow, I entreat you to answer me,' said the old woman, her fine, sharp, and prominent old features, and large grey eyes casting forth an expression of imploring earnestness.

'"My good fellow:" well, if I stand this from such as you, I'm ——,' muttered this surly porter, slamming the door in the poor creature's face.

The knock was repeated with redoubled energy, and the porter re-opened the door with a visible resolution to get rid of the intruder.

'Give your Lady this,' said the old woman, thrusting towards him a sealed letter: 'give her this, and I assure you, she will be overjoyed to see me.'

'My lady never suffers us to take in begging letters.'

'This is not a begging letter; and here is a half-crown for your trouble.'

'Well, what impudence you beggars have come to! You are a genteeler beggar than I should have thought by your looks; but, my good woman, it is more than my place is worth to receive petitions from beggars.'

'Stand aside! open the door! be quick! Here's my Lord and the Duke of —— coming down stairs!' said a lad in livery, whose countenance spoke a gentle nature,—that is, a nature not so long in office and authority as that of the surly porter of Lord Anketell's hall.

True it was that the stripling Duke of ——, who had just come into his immense estates after the nursings of a long minority, had terminated a pretty long interview with Lord Anketell, and his Lordship was accompanying his Grace from the drawing-room down stairs to the hall, and the servants had not been made aware of his approach. Some confusion and bustle took place; but the folding doors were widely thrown open, six or seven servants, in their splendid liveries, hastily drew up in a double line, bowing profoundly to the peers as they passed between, and holding their breaths whilst his Lordship gave the Duke a shake of the hand,—cordial and sincere in full proportion to his rank and unequalled affluence. It was in this scene of hurry and confusion that the little old woman in black had contrived to slip past the servants through the door without being perceived.

She had flitted, with a witch-like rapidity suited to her strange figure, through the outer hall, had passed the vestibule and the great staircase, and had actually got into the inner hall, and at the foot of the back stairs, without being perceived. Here she met a maid-servant descending with a small silver tray of sandwiches and liqueur glasses, and she immediately began to intreat her to take the letter to her Lady, offering the solitary half crown as an inducement. The maid coolly put the half crown in her pocket, and reading contemptuously the superscription of the letter, threw it into the tray, observing, as she passed, that it should be given to her Lady some time in the day, but she knew it would never be opened, for letters "of that look" never were. It was at the moment when the old woman was sinking upon a bench, overcome with affliction, that the servants of the hall discovered her. They had missed her immediately the Duke had got into his cab: and, after staring in every direction, to their astonishment they beheld her sitting, as they thought, at her ease in the inner hall.

'You impudent old wretch! how dare you get there?' cried the enraged porter, waddling to her, and seizing her by the shoulder to thrust her into the street. He had already pulled her to the foot of the grand staircase, when the woman thrust out her attenuated and withered arm, and grasped with her long thin fingers one of the volutes of a scagliola pedestal which supported a massive or-molu lamp.

'No power on earth shall force me hence! I will see Lady Anketell, or here will I die!' cried the old creature with a tone which almost terrified the servants. There was something dreadfully impressive in it, and it appeared almost supernatural when its energy and resolution were contrasted with the form from which it proceeded.

The porter seized her shrivelled, spider-leg like fingers, declaring, with an oath, that he would wrench them off, or crack her joints, if she did not let go her hold. He suited the word to the action, and evinced no symptoms that he had uttered an idle threat. His thick lips became purple with rage; but his victim firmly retained her hold, and bit her under lip that seemed more like parchment, whilst her eyes stared wildly at him, dilating as in the paroxysm of frenzy.

'For God's sake, Burton, don't break the poor old creature's wrist!—wait and she will give way;' said the lad we have before mentioned; and he took hold of the sturdy arm of his fellow-servant to restrain his violence.

'Let go, or I will squeeze your very nails off,' said the porter, and she uttered a faint screech, and her face became convulsed, though she seemed to grasp her object with undiminished firmness.

'Burton, she will pull down the pedestal and break the lamp; the noise will disturb his Lordship, and you know his temper when anything goes wrong.—Leave her alone, and I will get a policeman.'

These arguments of the lad had more effect than his appeal to humanity. The porter let go his grasp, the lad was sent for a police officer; and the footmen stood in a group; discussing whether it would be better merely to have the woman turned out, or taken before a magistrate.

In a few minutes the boy returned with a police officer. All eyes were immediately turned to the place of recent struggle, and every voice simultaneously cried out, 'By—— she is off; she has escaped!'

Where can she have got to?—how could she get away?—it is impossible! and a score of similar ejaculations, seemed to convey the idea that the servants really began to think they had been contending with a witch that had vanished into air.

'Go to!' said the policeman; 'why down stairs, to be sure, and she has robbed the house; and escaped, probably, up the area steps.'

This idea was adopted by all; each accused the other of stupidity, in not having at first thought of a thing so palpable; and at last all turned with fury on the lad for having prevented the violent ejection of the woman in the first instance. The poor boy stood in speechless terror, overwhelmed with the idea of having been the cause of a robbery in his Lordship's house. At length the policeman assumed the direction of affairs, and having placed a servant at the front and another at the back area, to prevent escape, he descended with a third, in order to search the offices and basement story of the mansion.

The supreme wisdom of all the parties was here entirely at fault. The fact was, that whilst the porter had stood with the outer door ajar waiting for the return of the foot-boy with an officer, and whilst the rest of the servants had got round him to settle the difficult point of simple ejection, or of ejection followed by custody in the station house, and correction by a magistrate, the old woman had almost flown up the grand staircase, and had entered a magnificent anteroom, where she stood gasping for breath, and her senses perfectly bewildered at the dreadful scene she had gone through.

It was with difficulty that she collected her scattered thoughts; but at last she grew sensible of the magnificence around her, and she began to reflect that the splendour seemed to realize, or surpass, all she had read in fairy tales about oriental grandeur and magic treasures. She paced fearfully through the scene, her mind too saddened by one sole object to be attracted by wealth, except through a vision of its power over the affections of nature. She found a door partly opened, and holding her breath, and stopping like a mortal upon the precinct of hallowed ground, she entered a bed-room, so superb as to make the preceding chamber appear almost poor. A painted ceiling, mirrors extending from that ceiling to the ground, buhl cabinets, and tables of enamel and gold, covered with china vases, bouquets, bijoutrie, and jewelry of dazzling lustre, might have confused the brain of any person whose mind was sufficiently at ease to be moved by splendor. There was a large bed, with its golden canopy, and royal purple curtains lined with rose satin, and on it was a human figure, but so buried in pillows of down, and shaded by lace, that it was impossible to tell whether it was the person of a child or of an adult. At the side of the bed were two tables of enamel and gold and of buhl, the one covered with new novels, and with poems and books of prints, superbly bound, and the other hid by a profusion of trinkets, rouge pots, scent bottles, perfume caskets, mirrors set in gold and ornaments beyond an ordinary capacity to name. A golden caudle cup, on a gold salver, stood in the middle, and its untouched contents showed that the patient had not been disturbed to cloy the surfeited appetite with refreshments. The once decent, but now rusty and somewhat tattered mourning of the old woman, with her humble widow's weeds, formed a singular contrast to the surrounding splendor, as she stood, with a palpitating heart, by the bed-side, gazing on it with a fearful restlessness, as if she dreaded to be seen by the object it supported, whilst at other moments she gazed upon the sleeping figure,

with an affection which seemed too intense to be endured. At last the figure moved, the lady awoke, and raised her beautiful face from the pillows, like a pearl from cotton.

'Oh God! Mary, child!' cried the old woman, as she staggered towards the bed, and made an effort to throw herself upon it, endeavoring to clasp her daughter in her arms, but the bed was by far too high, and the lady put out one of the most delicate and pretty hands ever seen, and shaking her lace ruffle, she beckoned to her mother not to come too near.

'My dear mother,' said she, 'for goodness' sake don't come so near; you don't know the mischief you might do. I have a fever on me, and your clothes are really wet. Why, you have not come through the rain?'

The old woman buried her face in the bed clothes, and sobbed piteously. At length recovering herself, she said, with a hurried tenderness—

'Oh, Mary, tell your poor, old mother, is there *any* danger?'

'Not exactly danger; but if my Lord were to know that you had been here, it might occasion an unpleasantness between us.'

"But, Mary, child, *are* you not in danger?'

'Danger, mother, how can I be in danger! am I not legally married, and have my rights; but when a man of Lord Anketell's rank and estate marries a workhouse apothecary's daughter like me, it is only grateful in me not to mortify him by my family, and in his own house too, and before his servants I trust in goodness you did not announce yourself as my mother?'

A large tear, or rather a continued tear, ran down the pale and withered cheek of the mother. With a tone altered almost to chilling apathy, she cried, 'Mary, I read in the newspaper that you were dangerously ill. You had never written to me since your marriage, and I was content not to mortify you; but when I found your life in danger—I who had nursed you through the cruel diseases of your infancy—I who had—oh God! oh God!—it was too much to let my child go out of the world without kissing her poor face—once, all my own. I have walked to London from ——— to hear one word of tenderness from my own child; and I find her life not gone; but nature is extinct, and you are the child of pride—not my child.'

'Lord Anketell's wife, you meant to have said, mother. But I really *was* ill. I caught a cold at Almack's; but as his Lordship wanted an excuse for not attending the House whilst the —— bill is in committee, he got the newspapers to publish that I was dangerously ill. Ha! ha! ha! Pray, mother, reach me that handkerchief, and the eau de Cologne. Your tears, I do declare, have taken all the curls out of my hair, and my wrist, too, is wet through and through. Lord, ma, only see the lace—'

'And you are not ill, Mary,' said the old woman; 'not really ill;' and she pressed the fair little hand to her haggard lips—hung over the face of her daughter, regardless of that which alone occupied that daughter's thoughts—the curls and the lace.

'But, ma, how shabby, how *very* shabby, and dirty, too, I declare—la, I would not have had my Lord's servants see you for the universe. You will never leave off those odious, unbecoming weeds—and father dead so long. Well, I'm glad to find you still living; and I hope you have been happy, and well—and—'

'Very happy, very well,' said the old woman, wringing her hands and sobbing bitterly.

'La, I thought I heard footsteps; didn't you?—do stop, you make such a noise—no, it is a mistake. Well, ma, I heard of your design about the tombstone in our churchyard and the monument. I was so alarmed—but I knew you hadn't exactly the means to incur such an expense—and so I was comforted, and—'

'Mary, Mary; that monument is already erected to your poor father's memory, and it expresses—'

'Gracious goodness! not that he was the village apothecary, I hope?'

'Yes, that he was for fifty years the doctor of that petty workhouse—the shopkeeper of our petty village—and that he was beloved by the poor, and respected by the rich.'

'Oh, how very unfortunate; for my Lord naturally wishes to avoid all tracing of my parentage, and Burke's Peerage merely says that Lord Anketell married Mary, daughter of —— ——, Esq., of——, in the county of ——, and that reads very well.'

'Oh, Mary, your brain is turned, and it breaks my poor old heart! My last illness cost me all the remains of my little property; even your poor old father's silver watch was sold, and now I—'

'Well, ma, that must have been your own fault, for never was there a better mother; and had you written one word—but give me that pocket book off the table—no, not the red with the gold clasp, but the purple with the ruby.'

The old woman mechanically handed the pocket book, and the fair lady raised herself on her downy pillows, and began to count its contents, and to descant on the operation, as she turned over leaf after leaf.

'No, that 126*l.* is for Mr. Taylor's bill, my shoemaker; he has not been paid any thing for four years, and must be paid; and this—let me see—what did I put these notes in this leaf for? oh, I remember, 93*l.* for the plumassier; and this 55*l.* is for the perfumer's account; and 37*l.* for the brushes and trifles of that description; but oh, this odious Madame de Tressor, my milliner and dressmaker—619*l.* in one year, and less than a half—well, my lord's check is not enough—he must settle this bill himself, for I'll have nothing to do with it. But here, my dear ma, I have no occasion to settle Mr. Payne's bill for the brushes and knick-knacks, and so, suppose you take this 37*l.* And the young and beautiful countess stretched out her hand, holding the folded notes slightly pressed between her thumb and finger towards the old woman, who stood aghast with astonishment.

'Ha! ha! ha! Well, ma, you make me laugh; you may well be astonished when you see such sums, and recollect how the shillings used to be saved, and the broken bottles sold from father's shop, to buy me my winter's cloak and clogs—but take the money.'

The old woman shook her head, and thrust the proffered notes from her.

'Why, ma, I should'nt offer them to you if they weren't mine. To be sure, when a rich man, or a man of title, marries a poor girl, he doesn't marry the whole family; and indeed it is not exactly honest for a woman to give away her husband's property to poor relations; but his lordship gave me this money for myself, and has no right to know what I have done with it; and if I appear in good style as his wife, and don't get into debt beyond his allowance, what right has he to complain; besides, if a rich old man marries a fine young woman, I don't see that the obligation is all on one side; and besides your are my mother.'

The mother groaned bitterly.

'It is not like helping cousins, nephews, nieces, and a swarm of toad eating, insincere, heartless kindred, so, ma—but, good gracious! the room is haunted, or I did hear footsteeps, and a sigh, too. Pray, ring the bell—no, not for the world—the servants would see you—but ma, look all round the room for me. You know how nervous I was when a child. Well, you won't stir? Good heavens! take the money and say good bye, and let me ring the bell, for I begin to be very much frightened. Here, dear mother, take the money, for your clothes are very thin for this bitter weather, and you must want it—indeed you must.'

During all this time, the poor old woman had stood upright and rigid; like a figure of extreme old age suddenly petrified. Her large gray eyes were dilated, and though they glanced upon her daughter they bespoke perfect vacancy, or at least an unconsciousness of the volubility with which she had been assailed. As the daughter again pressed her to take the money, she took the notes in her hand and crumpled them without the slightest alteration of attitude or change of countenance. Lady Anketell became alarmed, and thought the mother was what she called 'death struck.' 'For God's sake, take the money and go!' she exclaimed with earnestness. The old woman's lips were a little convulsed; she recovered her senses, and suddenly catching a glance at the ball of rumpled notes that she had been pressing in her palm with the grasp of convulsion, she dropped them on the floor, shaking her head, and clasping her hands, she left the room without uttering a word. She appeared like a corpse moving by mechanical contrivance. Lady Anketell followed her with her eyes till she had got out of the door; and then, taking an oval hand-mirror from her toilette, she began to adjust her curls, lest her waiting woman might see them in their disordered state.

As the mother descended the grand staircase, she was met by Lady Anketell's waiting woman followed by a footman with a tray and cold fowl and tongue, and decanters of wine. 'I am ordered, Madam,' said the maid, courtesying with the most profound respect, 'to give my Lord's most respectful compliments to you, and to say that his Lordship entreats that you will not leave the house without taking refreshments. His Lordship begs you will remain as long as is convenient, and, above all things, he hopes that you will order the carriage when you feel disposed to return home.' The old woman was startled at these sounds of respect and kindness: they touched her heart. Unable to speak, she shook her head in token of dissent. She had been recalled to sensation and consciousness: her efforts to conceal her emotion were fruitless: her lips were strongly convulsed, and, putting her hands to her face to hide her feelings, she burst into tears, and hurried out of the house through the line of servants, who bowed to her most respectfully as she passed through the hall. The humility of the servants was a contrast to their previous brutal violence, which could not be surpassed, except by the contrast between the manners of the daughter of the Countess of ———, and as plain Mary ———, the apothecary's daughter of ———, the belle of the village for whom so many shop-lads had once received and given many broken heads and bloody noses.

In fact, the sound of footsteps and the sigh which Lady Anketel had heard, or fancied she had heard, in the bed room, were not the sounds of a super, nor altogether of an unaatural being. His Lordship, in passing the ante-chamber, had been attracted by the deep sobs of his mother-in-law. He had entered the bed-room, and, concealed by the curtain, he had witnessed the whole scene between the daughter and the mother. His feelings were moved to the extent of offering the poor old creature refreshment and the ride home; they were moved to this extent, and no further.

Two pounds thirteen shillings and four pence halfpenny was the sum precisely which the poor old widow had in her pocket, as she tottered down the steps from the portico of her daughter's mansion at Whitehall. She hurried to the —— inn, at Whitechapel, and that night took her outside place in the mail to ——. It was a wet and bitterly cold night, preceding, by eight-and-forty hours, that night on which all hearts are made glad, all stomachs are filled to the verge of extravagance and wantonness; it was the night of the twenty-third of December, when the decrepit old widow seated herself outside the —— mail, immediately behind the coachman. The wind drove the sharp sleet so fiercely that no ingenuity of the loom could withstand its searchings, and but for the cold at the heart, the old widow might have been sensible that her daughter was not wrong in describing her dress as old, threadbare, and shabby—shabby—in such a night. The little curved hunchback was drenched to the skin, and looked like a whisk of frozen straw—a bunch of white bristles. The coachman, moved to pity, procured her an ostler's coat where he changed horses, and without the hope of the perquisite. Arrived at the village of ——, the widow was lifted into her cottage. The bright warming pan was put in requisition, and less than twelve hours had witnessed the transition of the old creature from sobbing on the quilt of Lady Anketell, in her splendid room, to gasping under the brown and red rug in her stone paved chamber. In four hours she was a corpse.

THE TOWNSMAN.—BY LEIGH HUNT.

More Boots; and no more Smith!

Boots being a subject of inexhaustible interest to the contemplative mind (whether the mind be of such an order as deeply observes the boots of other men, or of such as sits in the shape of a well-dressed body, more deeply considering its own; or lastly whether it be of that class, which uniting experience with reflection, comes to the question with an impartiality humanized by self-love,) we have willingly acceded to a request made to us for the utterance of some further thoughts on a matter so obviously connected with the "*march* of intellect."

Nor is it to be objected, that we are travelling out of the path of our Townsman, in devoting a whole paper to this very urbane subject; for besides its right to the application of that epithet in its ordinary sense, as implying a polished elegancy, it is well known to all the lovers of shoe-leather, that there is no boot like your "town-made boot;" and therefore no town-made article connected with the subject, whether boot or essay, can be anything but what is extremely proper and metropolitan.

Much could we say on the lustre of boots from all antiquity, especially during the heroic ages of Greece, when to say that a man was "well-booted," was to say that he was well-armed at all points, and irresistible. Homer's fondness for this epithet is so remarkable, that boots perhaps may be considered as the things he admired most, next to good cheer.—'Boot and saddle" *of mutton* may be conjectured to, have been his military cry— his interpretation of the sound of the trumpet. But we cannot enter at any length into the epical or historical parts of our subject. We must be content with catching a few of the most illustrious lights of it, as they strike upon us from the legs of ages; such as the Seven-league

boots of Giganticide, the boots of Napoleon, and on Frederick the Second, those of the cat that waited on the Lord Marquis of Carrabbas whose descendant has become so famous in the songs of Béranger,) and the boots of my lord the Bishop, who was made to dance in them by that merry Radical, Robin Hood; a dance still performed in private, they say, by some of his lordship's successors, in a delirium of anticipation.

We know but a single ill thing of boots in the whole circle of their history, and that is, the ingratitude with which one of them suffered Sir John Suckling to *die of him*, after having been the most brilliant and accomplished friend they had had in the annals of high life. Sir John, as every one knows, was one of the tip-top wits of the Court of Charles the First; and no man had ever done greater justice to the exterior manifestation of what a wit has in him, by the grace and spirit of his attire, from top to toe. His feather must have been among the airiest, and his boots among the most solid yet animated, that ever announced the quality of the wearer. We say nothing of his failure in a campaign—doubtless the work of envious fortune. A servant, envying the fortune that he still had in the shape of money, robbed him and ran away: Sir John, in his indignation, though the most generous of men, called for his boots in order to pursue the scoundrel, when on thrusting his foot down, his heel encountered a nail, or knite, or some such horror, (we forget what,) which the rascal is supposed to have stuck into the boot on purpose, and the result to the gallant poet was mortal. "Where were ye, nymphs, (who preside over boot-making,) when ye could allow such a catastrophe to take place? Nay, where were ye, who preside over dancing, and riding, and all 'poetries of motion,' that ye did not put a voice into the boot, and make it cry out against the approach of the ill-fated leg?" The tragedy was long ago, but the sweet wit is alive in his writings, and we cannot but feel for his wound to this day. That couplet alone in his *Ballad on the Wedding*—

> Her feet beneath her petticoat,
> Like little mice, stole in and out.

ought to have brought down Venus to save him. But Venus can sooner get people into scrapes than out of them. Perchance the boot, being, of course, exquisite of its kind and too small, was even less easily got off than on; so that the plunge being once taken ——— But we shall be distressing too much the legs of the reader's sympathy.

We had our admiration very pleasantly excited the other day by the candour of a friend of our's—a wit and a patriot withal, and one that would part with his leg and boot together to do the State service—that he never had any thing new sent home from the makers of his habiliments, but it made him rise that morning with the greater alacrity. It should be added, that he is both young and handsome enough to render an attention to these things natural and graceful. Yet what signifies handsomeness? If we are not handsome, we may have a handsome taste—an air—an address; and it is not a man's fault if nature has not given him a good leg. His nurses and progenitors must look to that. His soul may have a good leg—calf may be in his brain; why should he not help out his limbs accordingly, and, with the boot-maker's assistance, make his leg appear worthy of him? We remember the time ourselves, when a knock at our chamber-door, with "the tailor has brought the things, Sir," or the opening of our eyes upon a new pair of boots standing in the corner, and demanding (as the poets say) our legs inside of them, gave a new color to the morning. A youth buds forth into new clothes, as a tree with its blossoms. Nip not his bibs too coldly, nor breathe dulness upon the polish of his Warren's jet. He will outgrow his blossom, and produce fruit by-and-by. Charles Fox, one of the most natural of men, was at one time a buck about town, with red heels to his shoes. Petrarch reminds a friend, in one of his letters, of the time when they used to pace the streets of Avignon, conscious of their cloaks and stockings, and afraid of a spot of mud. But we grant that "the same is not the same." A youth may be a dandy, and nothing else, and remain one all his life. That is not desirable certainly; though seeing what he is, and that his thoughts cannot soar above his hat, perhaps we ought to be thankful that they can rise even so high, and that a regard for his very boots saves him from sheer grovelling in the mud. Mud is assuredly not what he likes. The countryman in the farce will not wear his boots in bad weather, for fear of spoiling them; and we have seen men in town, such as would have thought themselves preposterously treated by comparison with him, who nevertheless appeared quite as anxious to save the boots they had on from their ostensible uses, and occasionally turned round to survey them, as nicely as if they stepped in satin.

It must be owned, that boots, like other honors, are not to be worn without their drawbacks. The pulling on of a new pair, even when nothing *dandified* is intended, is often no joking matter; unless, indeed, a man has arrived at that time of life, or philosophy, or adversity, or *spindle-shankism*, when he has no more respect for his leg than for his walking-stick; or rather so much tenderness or pity for it, that he will consult its ease above all things. We confess this to be the case with ourselves, to whichever of those four causes the reader may choose to attribute it; therefore, as we have not been without our experience the other way, we may own, that, like Mr. Pepys when he chuckled at seeing people go to be married, it is not without something of a peculiar feeling of entertainment that we think of any one's undergoing the "torture of the boots," when the maker has just brought them home, and his helping them to put them on. There they go at it, the patient straining and tugging with the boot-hooks, the maker humoring and *palming* the fit, or non-fit, vowing that nothing can be better, and that a *leetle* more thrust at the instep will do the business. Occasionally they stop to take breath, or the bootmaker takes the hooks into his own hands, and then they go at it again; or they take the foot out and *recommence!* Horrible, yet refreshing moment! Big with the thoughts of the next tug! Then comes that detestable evidence of a struggle, the shoeing-horn; and the bootmaker, though he hails it as the terminator of all difficulties, knows very well that the instep will stick again, and that the gentleman will walk for the next ten days in a Valley of the Shadow of Gout, not because the boots have been made as directed, but because he has not the heart to send them home again.

And yet this shall be nothing, perhaps, to the achievement of taking the boots off again at night! Wear them all day he must, for he has got them; and get them off at night he must, or how is he to go to bed? Meantime his feet have swollen; their prison seems, for the last three hours, to have been growing closer and closer; and get them off he cannot! Boot-jacks are tried; servants are tried; the boy, suddenly letting go, is kicked almost through the wall. What is to be done? Sometimes there is no help for it, short of cutting the boots off; and blissful must be the release even then, to any one but a miser, spite of the convulsive twitches and resentment of the ill-treated muscles. We know a philosopher, now lost to all sense of his boots, except when he has to buy new ones, who, one night, when a young man, in the joviality of his despair at not being able to get off a pair, laughed at the impossibility of sleeping in them, and fairly took them to bed with him. Horrible was his waking about four o'clock in the morning, with a sense in his legs as if they had been turned into mile stones.

We had something to say on boots mudded, and boots too large, and boots suddenly burning one's legs at the fire-side, &c. &c.; but adieu, boots. We must suddenly break off and leave you, else we shall have no room to bid another adieu, little expected by us when we wrote our last, and in fact, denounced as impossible. Let no man say what will happen next Sunday; for we are positively about to give up our use of the name of Smith? 'Tis true!—and all, *after* all, to please Smith himself;—nay, to please John Smith!—John Smith whom we should still designate the Smithest of all Smiths, and therefore the voidest of all right to a particular consideration, had he not convinced us we were in the wrong by one of the most agreeable and charitable of letters. This was the correspondent whom we alluded to in our last, and whom in consequence of our not having referred to his first letter to mend our recollections, we had mistaken for Tomkins. Tomkins (as we are now reminded) he spoke of in that letter, but it was out of an inclusiveness of sympathy, and because while feeling for the sensitiveness of the Smiths, he thought himself bound not to overlook minor claims; or as he overwhelmingly puts it because "your creed teaches me to consider others first." Now who can resist such a Smith as this? Has he not brought together and concentrated the whole common-place universality of the Smiths into one particular and shining light, and forced us to acknowledge in his person the thoughtfulness due to others, even in a jest? and let us add (without giving the good-natured suggestion an air of solemnity beyond what he intended), that it is a good symptom of the times, when sympathy is so widely and so extending, that the "vested interest," even of a jest is good humoredly questioned in its behalf. Well, we have owned our weakness in this matter (for we are not strong minded and anti-conventional enough to own, except in this whisper of a parenthesis, that we consider it a strength), and shall frankly, and at once, give up all similar future use of the name of Smith. We do not care who taxes us for it. Being above poverty of spirit, we are above taxation. We shall "go on, Sir" (as the man said), "superior to a vicious sarcasm," "By excess of pride," saith Bacon, "the angels fell;" and by the excess of the desire of knowledge man fell; but in charity there is no excess, neither can Smith—we beg pardon, "*man* nor angel come in danger by it." This last slip of the tongue must be excused. Bad habits, like boots, are difficult to conquer.

Next week, we intend to make immense reparation to the name of Smith, and utterly to baffle the hopes of its scoffers, by touching upon the various memories, male and female, that have rendered it eminent. ☞

Generosity of a Robber.—After the defeat at Hedgely Moor, the Lancastrians concentrated their forces on the plain of Hexham Levels and there waited the advance of the Yorkists, resolving to place on the issue of the expected contest their final overthrow or triumph. The result of this battle is well known: the army of Henry was completely routed, and even the high cap of state, with its two rich crowns, fell into the hands of the Duke of York, who shortly after ascended the throne of England by the title of Edward the Fourth. Henry fled from the field; and Margaret, his queen, with the young prince Edward, escaped into an adjoining forest. They had scarcely entered within its intricacies, when they were seized by a band of ruffians who had there located themselves. Regardless of her rank, sex, or situation, they stripped the queen of her jewels, and were proceeding to greater indignities, when a quarrel arose between them as to the distribution of the spoil.—Seizing this favorable opportunity for escape, the prince and his mother fled into the interior recesses of the forest. As the royal fugitives were pursuing their toilsome journey through this wilderness, a rustling of the trees forewarned them of approaching danger; but before they could reach concealment, a robber confronted them in their path. "Ruffian," exclaimed the queen, assuming the dignity and haughtiness of carriage familiar to her, "thou hast tarried over long; thy comrades have been before thee, and despoiled us of our treasures." "Truly," answered the robber, "their chief will find but worthless prey in what they left you. You may pass: 'twere better that you take the right hand path, its windings lead to an opening of the forest." "Stay' man," said Margaret, "though a desperate outlaw, there yet may be some spark of pity in thee, some reverence for a kingly name." "Pity and reverence are terms alike unknown to me," replied the man, "and kingly power is but an idle sound to him who knows no sway—respects no laws;" "Yet will I trust thee," answered the Queen, "for fortune leaves us little choice of friends. Behold this boy—the son of Henry of Lancaster, your king." Whether surprise overpowered him, or a latent nobleness of mind forbade him to insult fallen majesty, the robber chief uncovered his head, and proffered his assistance to the wanderers. "What service said he, "can I render to you and the prince your son?" "Provide us with a place of concealment," eagerly rejoined the queen, "and effect our escape beyond the reach of York." "Concealment," said the robber, "is not difficult; and what more I can do I will do: for the present follow me to a cave hard by, where you may repose in safety, and wait a favorable opportunity of rejoining your friends." He led the way through an unfrequented path, and brought them to "a wretched but secure asylum" in the forest, which, in memory of the unfortunate queen, still retains the name of the "Queen's Cave."—[Fisher's Picturesque Illustrations.]

Extract from Bulwer's "Pilgrims of the Rhine."

'I know not what the love of others may be,' said Gertrude, 'but ours seems different from all which I have read. Books tell us of jealousies and misconstructions, and the necessity of an absence, the sweetness of a quarrel; but *we*, dearest Albert, have had no experience of these passages in love. *We* have never misunderstood each other, *we* have no reconciliation to look back to. When was there ever occasion for me to ask forgiveness from you? Our love is made up of only one memory—unceasing kindness!—a harsh thought, a wronging thought, never broke in upon the happiness we have felt and feel.'

'Dearest Gertrude," said Travelyan, 'that character of our love is caught from you; you, the soft, the gentle, have been its pervading genius; and the well has been smooth and pure, for you were the spirit that lived within its depths.'

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Upon which is delineated nearly all the Railroads now chartered in the U. States. It is designed to show the *present* contemplated connexion of the different lines, as well as where others may hereafter be constructed to connect with them. It may be had either in sheets, price $1 25, or put up in morocco for pocket maps, price $1 50, or on rollers at $2 25, in any quantity, by applying to the subscriber. D. K. MINOR, 35 Wall street.

New-York, April 2, 1835.

TO CIVIL ENGINEERS.

The Western Railroad Company, incorporated by an act of the General Assembly of the State of Tennessee, for the purpose of constructing a Railroad from the town of Jackson, in the county of Madison, by the most practicable route to the Mississippi river, wish to employ one or more persons as engineers to survey the route and superintend the location and construction of said road. Gentlemen who wish employment in the above capacity, will forward to the undersigned on or before the 3d day of June next, the terms upon which they are willing to engage, also the most unquestionable testimonials of good character and scientific and practical skill in works of the above description. An election of an engineer will not take place before the 3d of June.

By order of the Pres't & Directors.

JOS. E. TALBOT, Cash'r & Sec.

Jackson, March 18, 1834. j a12 3t

LOCOMOTIVE ENGINES.

☞ THE AMERICAN STEAM CARRIAGECOMPANY, OF PHILADELPHIA, respectfully inform the public, and especially Railroad and Transportation Companies, that they have become sole proprietors of certain improvements in the construction of Locomotive Engines and other railway carriages, secured to Col. Stephen H. Long, of the United States Engineers, by letters patent from the United States, and that they are prepared to execute any orders for the construction of Locomotive Engines, Tenders, &c. with which they may be favored, and pledge themselves to a punctual compliance with any engagements they may make in reference to this line of business.

They have already in their possession the requisite apparatus for the construction of three classes of engines, viz. engines weighing four, five, and six tons.

The engines made by them will be warranted to travel at the following rates of speed, viz. a six ton engine at a speed of 15 miles per hour; a five ton engine at a speed of 18 miles per hour; a four ton engine at a speed of 22 1-2 miles per hour. Their performance in other respects will be warranted to equal that of the best English engines of the same class, with respect not only to their efficiency in the conveyance of burthens, but to their durability, and the cheapness and facility of their repairs.

The engines will be adapted to the use of anthracite coal, pine wood, coke, or any other fuel hitherto used in locomotive engines.

The terms shall be quite as favorable, and even more moderate, than those on which engines of the same class can be procured from abroad.

All orders for engines, &c. and other communications in reference to the subject, will be addressed to the subscriber, in the city of Philadelphia, and shall receive prompt attention.

By order of the Company,

WILLIAM NORRIS, Secretary.

December 2d, 1833.

For further information on this subject see No. 49, page 778 of this Journal. de

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STEPHENSON,

Builder of a superior style of Passenger Cars for Railroads

No. 264 Elizabeth street, near Bleecker street,

New-York.

☞ RAILROAD COMPANIES would do well to examin these Cars; a specimen of which may be seen on that part o the New-York and Harlem Railroad, now in operation.

J 25 tf

RAILROAD CAR WHEELS, BOXES AND AND OTHER RAILROAD CASTINGS.

☞ Also. AXLES furnished and fitted to wheels complete at the Jefferson Cotton and Wool Machine Factory and Foundry, Paterson, N. J. All orders addressed to the subscribers at Paterson, or 60 Wall street, New-York, will be promptly attended to. Also, CAR SPRINGS.

Also, Flange Tires turned complete.

J8 ROGERS, KETCHUM & GROSVENOR.

NOVELTY WORKS,

Near Dry Dock, New-York.

☞ THOMAS B. STILLMAN, Manufacturer of Steam Engines, Boilers, Railroad and Mill Work, Lathes, Presses, and other Machinery. Also, Dr. Nott's Patent Tubular Boilers, which are warranted, for safety and economy, to be superior to any thing of the kind heretofore used. The fullest assurance is given that work shall be done well, and on reasonable terms. A share of public patronage is respectfully solicited. m18

INSTRUMENTS.

SURVEYING AND NAUTICAL INSTRUMENT MANUFACTORY.

☞ EWIN & HEARTTE, at the sign of the Quadrant, No. 53 South street, one door north of the Union Hotel, Baltimore, beg leave to inform their friends and the public, especially Engineers, that they continue to manufacture to order and keep for sale every description of Instruments in the above branches, which they can furnish at the shortest notice, and on fair terms. Instruments repaired with care and promptitude.

For proof of the high estimation on which their Surveying Instruments are held, they respectfully beg leave to tender to the public perusal, the following certificates from gentlemen of distinguished scientific attainments.

To Ewin & Heartte.—Agreeably to your request made some months since, I now offer you my opinion of the Instruments made at your establishment, for the Baltimore and Ohio Railroad Company. This opinion would have been given at a much earlier period, but was intentionally delayed, in order to afford a longer time for the trial of the Instruments, so that I could speak with the greater confidence of their merits, if such they should be found to possess.

It is with much pleasure I can now state that notwithstanding the Instruments in the service procured from our northern cities are considered good, I have a decided preference for those manufactured by you. Of the whole number manufactured for the Department of Construction, to wit: five Levels, and five of the Compasses, not one has required any repairs within the last twelve months, except from the occasional imperfection of a screw, or from accidents, to which all Instruments are liable. They possess a firmness and stability, and at the same time a neatness and beauty of execution, which reflect much credit on the artists engaged in their construction.

I can with confidence recommend them as being worthy the notice of Companies engaged in Internal Improvements, who may require Instruments of superior workmanship.

JAMES P. STABLER,
Superintendent of Construction of the Baltimore and Ohio Railroad.

I have examined with care several Engineers' instruments of your Manufacture, particularly Spirit levels, and Surveyor's Compasses; and take pleasure in expressing my opinion of the excellence of the workmanship. The parts of the levels appeared well proportioned to secure facility in use, and accuracy and permanency in adjustments.

These instruments seemed to me to possess all the modern improvement of construction, of which so many have been made within these few years; and I have no doubt but they will give every satisfaction when used in the field.

WILLIAM HOWARD, U. S. Civil Engineer.

Baltimore, May 1st, 1833

To Messrs Ewin and Heartte—As you have asked me to give my opinion of the merits of those instruments of your manufacture which I have either used or examined, I cheerfully state that as far as my opportunities of my becoming aquainted with their qualities have gone, I have great reason to think well of the skill displayed in their construction. The neatness of their workmanship has been the subject of frequent remark by myself, and of the accuracy of their performance I have received satisfactory assurance from others, whose opinion I respect, and who have had them for a considerable time in use. The efforts you have made since your establishment in this city, to relieve us of the necessity of sending elsewhere for what we may want in our line, deserve the unqualified approbation and our warm encouragement. Wishing you all the success which your enterprize so well merits, I remain, yours, &c.

B. H LATROBE,
Civil Engineer in the service of the Baltimore and Ohio Railroad Company.

☞ A number of other letters are in our possession and might be introduced, but are too lengthy. We should be happy to submit them, upon application, to any person desirous of perusing the same. m26

☞ TOWNSEND & DURFEE, of Palmyra, *Manufacturers of Railroad Rope*, having removed their establishment to Hudson, under the name of *Durfee, May & Co.* offer to supply Rope of any required length (without splice) for inclined planes of Railroads at the shortest notice, and deliver them in any of the principal cities in the United States. As to the quality of Rope, the public are referred to J. B. Jervis, Eng. M. & H. R. R. Co., Albany; or James Archibald, Engineer Hudson and Delaware Canal and Railroad Company, Carbondale, Luzerne county, Pennsylvania.

Hudson, Columbia county, New-York, January 29, 1833.

NOTICE TO MANUFACTURERS.

☞ SIMON FAIRMAN, of the village of Lansingburgh, in the county of Rensselaer, and state of New-York, has invented and put in operation a Machine for making Wrought Nails with square points. This machine will make about sixty 6d nails, and about forty 10d nails in a minute, and in the same proportion larger sizes, even to spikes for ships. The nail is hammered and comes from the machine completely heated to redness, that its capacity for being clenched is good and sure. One horse power is sufficient to drive one machine, and may easily be applied where such power for driving machinery is in operation. Said Fairman will make, vend and warrant machines as above, to any persons who may apply for them as soon as they may be made, and on the most reasonable terms. He also desires to sell one half of his patent right for the use of said machines throughout the United States. Any person desiring further information, or to purchase, will please to call at the machine shop of Mr. John Humphrey, in the village of Lansingburgh.—August 15, 1833. A29 tf RM&F

RAILWAY IRON.

☞ Ninety-five tons of 1 inch by ¾ inch, 200 do. 1¼ do. ¾ do., 40 do. 1½ do. ¾ do., 800 do. 2 do. ¾ do., 800 do. 2½ do. ¾ do., soon expected.

Flat Bars in lengths of 14 to 16 feet counter sunk holes, ends cut at an angle of 45 degrees with splicing plates, nails to suit.

250 do. of Edge Rails of 36 lbs. per yard, with the requisite chairs, keys and pins.

Wrought Iron Rims of 30, 33, and 36 inches diameter for Wheels of Railway Cars, and of 60 inches diameter for Locomotive wheels.

Axles of 2¼, 2⅜, 2½, 3, 3¼, 3½, and 3¾ inches diameter for RailwayCars and Locomotives of patent iron.

The above will be sold free of duty, to State Governments and Incorporated Governments, and the Drawback taken in part payment.

A. & G. RALSTON.
9 South Front street, Philadelphia.

Models and samples of all the different kinds of Rails, Chairs, Pins, Wedges, Spikes, and Splicing Plates, in use, both in this country and Great Britain, will be exhibited to those disposed to examine them. d71meowr

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SURVEYORS' INSTRUMENTS.

☞ Compasses of various sizes and of superior quality warranted.

Leveling Instruments, large and small sizes, with high magnifying powers with glasses made by Troughton, together with a large assortment of Engineering Instruments, manufactured and sold by E. & G. W. BLUNT, 154 Water street, corner of Maidenlane.,

J31 6t

ENGINEERING AND SURVEYING INSTRUMENTS.

☞ The subscriber manufactures all kinds of Instruments in his profession, warranted equal, if not superior, in principles of construction and workmanship to any imported or manufactured in the United States; several of which are entirely new: among which are an Improved Compass, with a Telescope attached, by which angles can be taken with or without the use of the needle, with perfect accuracy—also, a Railroad Goniometer, with two Telescopes—and a Levelling Instrument, with a Goniometer attached, particularly adapted to Railroad purposes.

WM. J. YOUNG,
Mathematical Instrument Maker, No. 9 Dock street, Philadelphia.

The following recommendations are respectfully submitted to Engineers, Surveyors, and others interested.

Baltimore, 1832.

In reply to thy inquiries respecting the instruments manufactured by thee, now in use on the Baltimore and Ohio Railroad, I cheerfully furnish thee with the following information. The whole number of Levels now in possession of the department of construction of thy make is seven. The whole number of the "Improved Compass" is eight. These are all exclusive of the number in the service of the Engineer and Graduation Department.

Both Levels and Compasses are in good repair. They have in fact needed but little repairs, except from accidents to which all instruments of the kind are liable.

I have found that thy paterns for the levels and compasses have been preferred by my assistants generally, to any others in use, and the Improved Compass is superior to any other description of Goniometer that we have yet tried in laying the rails on this Road.

This instrument, more recently improved with a reversing telescope, in place of the vane sights, leaves the engineer scarcely any thing to desire in the formation or convenience of the Compass. It is indeed the most completely adapted to lateral angles of any simple and cheap instrument that I have yet seen, and I cannot but believe it will be preferred to all others now in use for laying of rails—and in fact, when known, I think it will be as highly appreciated for common surveying.

Respectfully thy friend,
JAMES P. STABLER, Superintendant of Construction of Baltimore and Ohio Railroad.

Philadelphia, February, 1833.

Having for the last two years made constant use of Mr. Young's "Patent Improved Compass," I can safely say I believe it to be much superior to any other instrument of the kind, now in use, and as such most cheerfully recommend it to Engineers and Surveyors. E. H. GILL, Civil Engineer.

Germantown, February, 1833.

For a year past I have used Instruments made by Mr. W. J. Young, of Philadelphia, in which he has combined the properties of a Theodolite with the common Level.

I consider these Instruments admirably calculated for laying out Railroads, and can recommend them to the notice of Engineers as preferable to any others for that purpose.

HENRY R. CAMPBELL, Eng. Philad., Germant. and Norrist. Railroad

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